MASSACHUSETTS CANCER REGISTRY

Abstracting and Coding Manual For Hospitals

Fourth Edition

November 2001

corresponding to NAACCR Data Exchange Record Layout Versions 9 and 9.1 for diagnoses made in 2001 and 2002

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Abbreviations Repeated in this Manual

ACoS	American College of Surgeons
AJCC	American Joint Committee on Cancer
aka	also known as
BRM	biological response modifier
CDC	Centers for Disease Control and Prevention
CNS	Central Nervous System
COC	Commission on Cancer
CT	computed tomography scan
DPH	Massachusetts Department of Public Health
EOD	Extent of Disease (SEER)
ICD-O-2	World Health Organization's *International Classification of Diseases for Oncology, Second Edition*
ICD-O-3	World Health Organization's *International Classification of Diseases for Oncology, Third Edition*
MCR	Massachusetts Cancer Registry
MRI	magnetic resonance imaging
NAACCR	North American Association of Central Cancer Registries
NOS	not otherwise specified
PET	positron emission tomography scan
SEER	National Cancer Institute's Surveillance, Epidemiology and End Results program
TNM	staging system of the American Joint Committee on Cancer's *Cancer Staging Manual, Fifth Edition*

PREFACE TO THE FOURTH EDITION

This edition of the Massachusetts Cancer Registry *Abstracting and Coding Manual for Hospitals* is a revision of the Third Edition (published in 1999). It applies to cases diagnosed during 2001 and 2002 and corresponds, whenever possible, to the data standards for the North American Association of Central Cancer Registries' Data Exchange Record Layout Versions 9 and 9.1. [There are no differences between the physical *layouts* of Version 9 and 9.1 (i.e., where each data field is stored in a case record, and the overall record length); there are slight differences in a few data standards and field names between the two Versions, and the MCR is adopting the Version 9.1 standards now.]

The Massachusetts Cancer Registry (MCR) continues to strive for compatibility with coding and abstracting practices of the National Cancer Institute's Surveillance, Epidemiology and End Results (SEER) program, the Centers for Disease Control and Prevention's National Program of Cancer Registries (CDC/NPCR), the North American Association of Central Cancer Registries (NAACCR), and the American College of Surgeons (ACoS). Compatibility with these groups assures consistent coding and allows Massachusetts hospitals and the MCR to compare data with other states and the nation.

The Massachusetts Cancer Registry Cancer Information Management System (MCR-CIMS) has been revised to accommodate the changes in this manual. Vendors of software reporting programs have also been informed of these changes.

The codes in this edition are to be used for cases diagnosed between January 1, 2001 and December 31, 2002. Pre-2001 cases that have already been abstracted should not be re-coded. A copy of the Third Edition of this manual should be retained in each hospital registry for reference when pre-2001 diagnoses have to be abstracted.

If the Date of Diagnosis of a particular case is completely unknown, the year of diagnosis should be estimated and the case coded accordingly with the data standards of the estimated diagnosis year; if even the approximate year of diagnosis cannot be estimated, the case should be coded in accordance with the coding standards for the Date of First Contact. (For example, if your facility's first contact with a cancer patient is on March 1, 2001 *and you cannot estimate the year of diagnosis* for the case, code the case as if the diagnosis occurred during 2001, i.e., with ICD-O-3 and Summary Stage 2000 coding.)

The format of this manual has been designed for placement in a three-ring binder which will allow the MCR to update the text easily. As changes are made, updated replacement pages will be sent to all hospitals so that each copy of the *Manual* will remain consistent with current abstracting and coding procedures.

The following is a summary of the **data fields that have been deleted, changed or added** since the previous edition of this *Manual*:

Table I

Fields Deleted Since the Third Edition

These data fields are no longer collected by the MCR:

- Discharge Date
- Surgical Approach
- Surgical Margins

Fields Changed Since the Third Edition

Data Field	Comments
Sequence Number -- Hospital (p. 33)	**New name** for the sequence number we collect from you.
Date of First Contact (p. 39)	**New name** for the field "Date of Admission or First Contact".
Birthplace, Place of Death (p. 45, p. 182)	Some **new codes** for these fields (in Appendix B) have been added, and a few old codes are no longer valid.
Race (p. 53)	The single code to describe a patient's race has been expanded into **five separate fields** so that multiracial patients may be recorded. Some additional details for categories "Asian Indian" and "Other Asian" have been added from a SEER manual. Instructions for how to assign codes have expanded.
Primary Site Code (p. 71)	The change to **ICD-O-3** coding has caused some changes in site coding rules for hematopoietic diseases.
Histologic Type ICD-O-2 (p. 79)	**New name** for the histologic type codes applicable to diagnoses made from 1992 through 2000.
Behavior Code ICD-O-2 (p. 84)	**New name** for the behavior codes applicable to diagnoses made from 1992 through 2000.
Grade/Differentiation/Immunophenotype Code (p. 89)	**New name** for Grade/Differentiation/Cell Origin Code.
Class of Case (p. 96)	**Class 6** cases changed from analytic to nonanalytic (for diagnoses as of 2000) since the Third Edition was published.
EOD -- Tumor Size (p. 100)	**New rules** conforming to SEER standards, most importantly for melanomas; **new name** for Tumor Size.
SEER Summary Stage 1977 (p. 130)	**New name** for the codes derived from the Summary Staging scheme that applies to diagnoses made through 2000.

Table I (cont.)

Data Field	Comments
Text -- Staging (p. 147)	**New definition** for this item, conforming to its standard use.
Date of First Course Treatment--COC (p. 152)	New **collected item** for the MCR. We used to generate the treatment start date by choosing the earliest treatment modality date reported. We will now simply collect this date from you.
Diagnostic, Staging, or Palliative Procedures (pp. 153-155)	**New names** for the fields that were called "non cancer-directed surgery".
Other Cancer-Directed Therapy (pp. 178-180)	Special **rules for** coding treatment for **hematopoietic primaries** have been added.
Fields Added Since the Third Edition	
Sequence Number -- Central (p. 35)	This field is **not collected** from you. It is generated at the MCR and used for running automated edits on cases.
Race 1, 2, 3, 4, 5 (pp. 55-59)	allow the coding of multiracial patients
Histologic Type ICD-O-3 (p. 79)	for diagnoses made in 2001 and thereafter
Behavior Code ICD-O-3 (p. 85)	for diagnoses made in 2001 and thereafter
ICD-O-3 Conversion Flag (p. 88)	**New item**, produced by you or your data system. This field describes any code conversions (automatic or manual) that were applied to produce the ICD-O-3 codes in a case report.
Institution Referred From, Institution Referred To (pp. 98, 99)	**New items** for the MCR, **read-only** on our system. These fields contain codes for other facilities that have been involved with a cancer patient.
SEER Summary Stage 2000 (p. 131)	for diagnoses made in 2001 and thereafter
Date Case Report Received (p. 183)	**New item** for the MCR, but it's not collected from reporting facilities. We will record the date on which we receive each new case report that is uploaded to our system.
EOD -- Extension, EOD -- Extension Prostate Pathology, EOD -- Lymph Node Involvement (pp. 144-145)	New **optional**, **read-only** fields. **If** your facility records SEER EOD staging, we will be able to look at these codes They are **not** required at this time and will **not** be edited by us.
Staging Narrative fields: Physical Exam; X-Rays/Scans; Scopes; Lab Tests; Operative; Pathology (pp. 145-147)	These text fields hold summary information pertinent to understanding the case's diagnosis, workup and staging.

The purpose of this manual is to establish common data standards governing the collection of cancer data by the MCR so as to ensure uniform reporting of statewide cancer statistics.

This manual is designed to be a working document that will change continually to reflect changes that occur in coding and data standards. The MCR welcomes your questions, comments and suggestions for this manual. Please direct these to:

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SECTION I - INTRODUCTION

Introductory Note

The Massachusetts Cancer Registry (MCR) was established by legislation -- Massachusetts General Law Chapter 111, Section 111b -- in July 1980. This bill authorized the Commissioner of Public Health to establish a statewide cancer incidence registry and mandatory reporting system. After a planning and approval period of approximately two years, the MCR began operations (within what became the Bureau of Health Statistics, Research and Evaluation) on January 1, 1982.

The purpose of the MCR is twofold: first, the Registry is designed to provide public information and statistical analyses of cancer incidence in Massachusetts; second, it is designed to serve as a resource for epidemiologic investigations of cancer in Massachusetts. The design and structure of the registry were developed based upon the experience of several other population-based registries in North America and Europe.

In the fall of 1994, the MCR was awarded a grant from the CDC under the National Cancer Registries Amendment Act to expand both the data set and the existing reporting requirements to include not only hospitals, but all health care facilities and practitioners. As a result, the regulations governing cancer reporting in Massachusetts (105 CMR 301.000) were amended on March 24, 1995 to expand the collected data set. These regulations were then further revised to expand the definition of those required to report cancer cases to include non-hospital reporting sources on October 6, 1995.

The MCR *Abstracting and Coding Manual for Hospitals* is designed to provide hospitals with abstracting and coding procedures pertaining to those data items contained in the MCR data set. In no way does this manual imply any restriction on the type or scope of information collected at the hospital level. Many hospitals, particularly those with ACoS-approved cancer programs, will collect a much larger data set. Facilities may choose to accession cases that are not reportable to the MCR, such as basal and squamous cell carcinomas of the skin.

Confidentiality

As stated previously, Chapter 111, Section 111B of the Massachusetts General Laws established the Cancer Registry within the Massachusetts Department of Public Health to record cases of malignant disease in Massachusetts residents. The Cancer Registry Regulations (at 105 CMR 301.040) stipulate that the identity of individual patients whose cases are reported to the MCR are to be held in the strictest confidence. Information concerning a particular individual, and any other information maintained by the MCR which, because of name, identifying number, mark, or description, can be readily associated with a particular individual shall not be released to or discussed with anyone other than authorized personnel at the reporting facility, unless prior informed consent is received from the patient or his/her guardian or legal representative.

Massachusetts General Law does provide [at 105 CMR 301.040(E)] for the release of MCR data by the Commissioner of Public Health, for research and statistical purposes, to the authorized representative of a study or research project sanctioned by the Commissioner under strict conditions guaranteed to maintain confidentiality. The Cancer Registry Regulations specifically prohibit the release of Social Security Number. The MCR also maintains confidentiality policies and procedures to protect information that could be used to identify data concerning a specific facility or physician.

Casefinding

Casefinding is the process of identifying reportable cases. It involves careful monitoring of records maintained by the departments that usually deal with cancer patients at your facility.

The primary sources for case identification include these records:

- pathology reports (histology, cytology, hematology, bone marrow, autopsy findings)
- disease indexes
- daily discharges
- outpatient records
- radiation therapy records
- oncology clinic records

The following should also be considered as additional sources for casefinding:

- surgery reports
- nuclear medicine logs and radiology logs (including logs of scans)

General Reporting Requirements

Hospitals must report all cancer cases diagnosed on or after January 1, 1982, whether first seen at their facility with evidence of cancer or for cancer-directed treatment. Cases diagnosed first at autopsy should also be reported. A report is required regardless of whether or not the patient was diagnosed elsewhere previously. A report is not required if the patient was first seen at the reporting hospital prior to January 1, 1982 and is admitted again after that date. Do not report recurrences. Massachusetts residents and non-residents (as well as residents of foreign countries) are to be reported.

Nonanalytic cases of Class 3, 4, and 9 *diagnosed during 1995 and thereafter* should be reported. Cases of Class 3, 4, and 9 *diagnosed before 1995* should not be reported. (Nonanalytic cases of Class 5 -- autopsy-only cases -- are reportable for any diagnosis year 1982 and thereafter.) Reporting cases of Class 6 to the MCR is optional; if a Class 6 case was *diagnosed before 1996*, it should not be reported.

Cases must be reported to the MCR within 180 days (six months) of the date of diagnosis for all analytic cases and autopsy-only cases (Classes 0, 1, 2, and 5). Cases of Classes 3, 4, 6, and 9 must be reported to the MCR within 180 days of your facility's date of first contact with the patient. (For example, if a patient was diagnosed January 1, 2001 but *your* facility had no contact with the patient until January 1, 2003 and the case is of Class 3 to you, then you are required to report the case to the MCR by July 1, 2003.)

See the **REPORTABILITY** section for details of reporting requirements.

Reporting Methods: Media and Formats

Cases should be reported to the MCR on floppy diskette (3.5-inch, IBM-formatted) in NAACCR Data Exchange Record Layout Versions 9 or 9.1. If this is impossible, cases may be reported on paper MCR Cancer Patient Abstracts, available from the MCR (telephone 617-624-5645). Paper submissions to the MCR must be printed legibly or typed.

For facilities employing the services of a software vendor for reporting cases, it is the *hospital's* responsibility to work with that vendor to ensure that the proper data fields are received at the MCR in the proper format. The MCR does not have contracts with software vendors and therefore cannot be involved in arrangements with them. This is the hospital's responsibility.

Changes to Previously Submitted Cases

With the passage of time, a patient's medical record becomes more complete with regard to information initially missing or uncertain. It is therefore established practice to accept the thinking and information about the case at the time of the latest submission, or the most complete or detailed information. Thus, there may be changes in the coding of primary site, histology, stage (at diagnosis), etc., as the information becomes more certain. The patient's birthdate, Social Security Number, or the spelling of his/her name might also be changed on your data system. The MCR must be made aware of such changes.

There may also be cases reported which later information indicates never were reportable diagnoses. The MCR must be notified so that these cases can be deleted from our system.

The MCR no longer accepts changes/deletes on paper forms. Also, do not send changes on diskette. If submitted in a batch of new cases on diskette, changes appear to our system as new cases and they must be processed fully before they can be identified as a "change form". This slows the MCR's case processing and inflates the reporting facility's duplicate case counts.

You should call the MCR at 617-624-5645 and report a change/delete over the telephone. Ask to speak to one of our cancer registrars, and have the patient's identifiers ready. Be sure to speak directly to a registrar, or leave a message that you'd like to be called back. Do not leave patient information on the MCR voice-mail system.

References

In addition to this manual, a hospital registry should have the following references for coding:

- *International Classification of Diseases for Oncology, Third Ed.* (World Health Organization, 2000; errata published May 2001) -- The "ICD-O-3" (purple) manual contains internationally recognized codes for different types of cancer and sites in the body where they occur. This edition is used for cases diagnosed in 2001 and later. The softcover version (subtitled *US Interim Version 2000*) differs slightly from the hardcover version, and portions of the May 2001 errata also apply to the softcover version. Be sure that your copy (hard or soft) is kept updated.
- *International Classification of Diseases for Oncology, Second Ed.* (World Health Organization, 1990) -- The "ICD-O-2" (green) manual is used for cases diagnosed between 1992 and 2000. After its publication, a few histology codes and a grade/cell origin code were added to the ICD-O-2 codes, and a topography code was deleted. Be sure that your copy was kept updated.
- *International Classification of Diseases for Oncology, First Ed.* (World Health Organization, 1976) -- "ICD-O" or "ICD-O-1" is used to code cases diagnosed before 1992. (Field trial editions of ICD-O-2 published 1986 - 1988 may be used for coding diagnoses between these years and 1991.)
- *SEER Summary Staging Manual 2000: Codes and Coding Instructions* (National Cancer Institute, 2001) -- This (red) book defines SEER Summary Stages and codes for diagnoses made in 2001 and thereafter. The manual appears on the SEER website at http://seer.cancer.gov/Publications/SummaryStage. Electronic versions of this book posted on the SEER website *before June 18, 2001* differ slightly from the final (hard-copy) version. Be sure that your copy is kept updated.
- *Summary Staging Guide for the Cancer Surveillance, Epidemiology and End Results Reporting (SEER) Program* (National Institutes of Health, 1977, last Revision 7/86) -- This staging guide defines SEER Summary Stages for diagnoses made between 1977 and 2000. The same material can also be found in the SEER *Self Instructional Manual for Tumor Registrars: Book 6*. This book may now be referred to as "SEER Summary Staging Guide 1977".
- *Cancer Staging Manual, Fifth Ed.* (American Joint Committee on Cancer, 1997; clarifications issued 1/22/99) - This manual contains definitions and explanations required for assigning TNM stages to cases diagnosed between 1998 and 2002. [The 4th Ed. (called *Manual for Staging of Cancer*) should be used to stage cases diagnosed between 1993 and 1997; the 3rd Ed. is for staging cases diagnosed 1989 - 1992; the 2nd Ed. is for cases diagnosed 1984 - 1988; the 1st Ed. is for cases diagnosed before 1988.]

- *Self Instructional Manual for Tumor Registrars, Book 8, Antineoplastic Drugs, Third Ed.* (SEER Program, National Institutes of Health, 1993). *Book 8* is THE standard source for coding drugs used in cancer treatment. SEER, the ACoS/COC and the NAACCR all refer to this manual for standardized drug coding.

The following references can be very helpful when abstracting and coding cases.

- *Self Instructional Manuals for Tumor Registrars* (SEER Program, National Institutes of Health)
  Book 1. *Objectives and Functions of a Tumor Registry* (1999)
  Book 2. *Cancer Characteristics and Selection of Cases* (1991)
  Book 3. *Tumor Registrar Vocabulary - The Composition of Medical Terms* (1992)
  Book 4. *Human Anatomy as Related to Tumor Function* (1995)
  Book 5. *Abstracting a Medical Record: Patient Identification, History and Examinations* (1993)
  Book 6. *Classification for Extent of Disease (Summary Staging Guide)* (1977)
  Book 7. *Statistics and Epidemiology for Cancer Registries* (1994)
  Book 8. *Antineoplastic Drugs* (1993) -- noted above
- *Standards of the Commission on Cancer Volume II: Registry Operations and Data Standards (ROADS).* (American College of Surgeons, 1996, *Supplement* issued 1997; revisions dated 1/1/1998, 3/16/2000, 8/2000) -- This manual contains field definitions and codes recommended for use in hospitals with ACoS approved cancer programs. This replaced the *Data Acquisition Manual* (DAM). Keep your copy updated.
- *Standards for Cancer Registries, Volume II: Data Standards and Data Dictionary, Fifth Ed.* (North American Association of Central Cancer Registries, 2000) and *Sixth Ed.* (2001) -- These books describe the data fields and codes accepted in the NAACCR data exchange record layout Versions 9 (2001 diagnoses) and 9.1 (2002 diagnoses). It is useful for understanding why certain codes fail edits, which data fields are required (or only recommended) by different groups, how the coding of some fields has changed, and on which data items the standard-setting organizations still disagree.
- *The SEER Program Code Manual, Third Ed*. (SEER Program, National Institutes of Health, 1998). This book provides the data standards for recording cancer cases for SEER registries. It applies to diagnoses made as of January 1, 1988.
- *SEER Extent of Disease -- 1988, Codes and Coding Instructions, Third Ed*. (SEER Program, National Institutes of Health, 1998; errata/corrections issued July 2000). This book provides the codes and instructions for recording staging data in the SEER Extent of Disease system.

Abstracting Requirements for Nonanalytic Cases

Although the ACoS does not require hospitals to abstract nonanalytic cases, population-based cancer registries like the MCR must record all cases regardless of place of diagnosis or class of case. The MCR therefore requires that nonanalytic cases (of Classes 3, 4, 5 and 9) be abstracted and submitted to the MCR. Reporting cases of Class 6 (also now nonanalytic) is optional; *if* your facility collects Class 6 cases, you should report them to us. (See pages 96-97 for definitions of "Class of Case".)

Reporting requirements for cases included in Classes 3, 4, 6 and 9 are less stringent than those for other cases. The reporting hospital's medical record often does not contain all the required data, or contains only second-hand data. Report any information included in the medical record. It is not necessary to obtain *missing* information, although you may choose to do so.

Although a complete abstract is not required, certain data items must be completed in order for the case to be processed:

- Reporting Facility Code
- Medical Record Number or Accession Number
- Patient Name (Last, First, Middle)
- Address (preferably at the time of diagnosis; otherwise, for the current admission)
- Birth Date
- Age at Diagnosis
- Social Security Number
- Sex
- Race Codes
- Primary Site Code
- Laterality
- Histology/Behavior/Grade Codes
- Date of Diagnosis
- Sequence Number--Hospital
- Type of Reporting Source
- Date of Last Contact

Even though information for many required data fields might not be available, all of the fields must be filled in (i.e., not left empty). When necessary, enter the codes for UNKNOWN or NONE.

SECTION II - REPORTABILITY

Determining Reportability

The MCR requires reporting facilities to submit all cases seen at that facility with neoplasms classified as malignant or *in situ* in the "Morphology of Neoplasms" section of ICD-O-3 (for cases diagnosed in 2001 and thereafter), ICD-O-2 (for diagnoses made between 1992 and 2000), or ICD-O[-1] (for 1982-1992 diagnoses). (This MCR Manual applies to 2001 and 2002 diagnoses, so only ICD-O-3 codes appear here.) If you've changed a listed behavior in an ICD-O book to /**2** or /**3**, that case is also reportable (the "matrix" rule, ICD-O-3 Rule F). The only exceptions to these reportability rules are the site/morphology combinations that follow:

morphology	
8000-8005	malignant neoplasms, NOS, of the skin (C44.0-C44.9)*
8010-8046	epithelial carcinomas of the skin (C44.0-C44.9)*
8050-8084	papillary and squamous cell carcinomas of the skin (C44.0-C44.9)*
8090-8110	basal cell carcinomas of any site except genital sites*

Note: The above lesions are reportable for skin of the genital sites -- vagina, clitoris, vulva, prepuce, penis, and scrotum (C52.9, C51.0-C51.9, C60.0, C60.9, and C63.2).

In addition, the MCR requires reporting of all cases with behavior codes 0, 1, 2 or 3 of the meninges, brain, and central nervous system (C70.0, C70.1, C70.9, C71.0-C71.9, C72.0-C72.5, C72.8, and C72.9). See pages 11 and 13 for more information. **

Beginning with cases diagnosed on or after January 1, 1998, the MCR no longer requires reporting facilities to submit cases of carcinoma *in situ* of the uterine cervix (primary site C53._ with histologic type codes 8000-8110 and behavior code 2). This includes cervical intraepithelial neoplasia, Grade III (CIN III, histology 8077/2), pre-invasive cervical neoplasia, and squamous intraepithelial neoplasia. Invasive carcinomas of the cervix (behavior code 3) are still reportable.

Beginning with cases diagnosed on or after January 1, 1998, the MCR also no longer requires cases of anal, vaginal or vulvar intraepithelial neoplasia, Grade III (AIN, VAIN, VIN, histology 8077/2), nor prostatic intraepithelial neoplasia, Grade III (PIN, histology 8148/2). (This "Grade III" does not refer to the histopathologic grade/differentiation; it refers to the highest category of dysplasia in the Bethesda system for non-invasive lesions.)***

* The ACoS Commission on Cancer requires collection of C44_ skin cancers with histologies 8000-8110 that have an AJCC stage group of II, III or IV by registries reporting to them. The MCR does not want these skin cancers, regardless of stage.

** Pituitary and pineal glands and craniopharyngeal duct (C75.1-C75.3) are not included in this requirement, even though the Central Brain Tumor Registry of the U.S. collects cases of benign and uncertain behavior for these sites. For primary sites C75.1-C75.3, only report cases with invasive or *in situ* behavior (/3, /2) to the MCR.

*** Central registries are supposed to continue collecting VAIN III, VIN III and AIN cases, but the MCR has decided against this. At the MCR, it is not easy to tell if cases reported with these descriptors are actually of a high enough severity of dysplasia to be truly coded with a behavior code of /2.

Definition of a Cancer Diagnosis

A patient is considered to have a reportable diagnosis if the diagnosis is made by a recognized medical practitioner, even if it is never pathologically confirmed. In most instances, the patient's medical record clearly presents the diagnosis of cancer by use of specific terms which are synonymous with cancer. The physician, however, may not always be certain, nor the recorded language definitive. The terms used to describe a tumor may be vague or ambiguous.

The following lists should be used as a guide in determining reportability. A *positive pathology report*, however, takes precedence over any other report or statement in a patient's chart.

Reportable

A case is reportable if any of the following (SEER) terms is used:

- apparently malignant
- appears malignant
- comparable with malignancy
- compatible with malignancy
- consistent with malignancy
- favors malignancy
- malignant appearing
- most likely malignant
- presumed malignant
- probable malignancy
- suspect(ed) malignancy
- suspicious of/for malignancy *
- typical of/for malignancy

* If a **cytology** (only) is reported as "suspicious", do not interpret this as a diagnosis of cancer. Report the case only if a positive biopsy or a physician's clinical impression of cancer supports the cytology findings.

Non-Reportable

A case is not reportable if any of the following (SEER) terms is used (in the absence of more definitive terminology or better information):

- equivocal (for) malignancy
- malignancy cannot be ruled out
- possible malignancy
- potentially malignant
- questionable malignancy
- rules out malignancy
- suggests malignancy
- worrisome

Lobular Carcinoma *in Situ*

Some physicians do not consider cases of lobular carcinoma *in situ* (LCIS) to be malignancies. Because the histologic type is listed in ICD-O-3 with behavior code **2** (8520/2), the disease is reportable to the MCR. (In the future, the AJCC may choose to discontinue its collection and staging of this disease as an *in situ* cancer, but it remains reportable to the MCR.) Abstract and submit these to us.

Tumors of the Brain and Central Nervous System

The MCR requires the reporting of all cases with a benign behavior (**0**), uncertain/borderline behavior (**1**), *in situ* behavior (**2**) or malignant behavior (**3**) for the following ICD-O-3 primary sites:

Meninges

- C70.0 Cerebral meninges
- C70.1 Spinal meninges
- C70.9 Meninges, NOS

Brain

- C71.0 Cerebrum
- C71.1 Frontal lobe
- C71.2 Temporal lobe
- C71.3 Parietal lobe
- C71.4 Occipital lobe
- C71.5 Ventricle, NOS
- C71.6 Cerebellum, NOS
- C71.7 Brain stem
- C71.8 Overlapping lesion of brain
- C71.9 Brain, NOS

Spinal Cord, Cranial Nerves, and Other Parts of Central Nervous System

- C72.0 Spinal cord
- C72.1 Cauda equina
- C72.2 Olfactory nerve
- C72.3 Optic nerve
- C72.4 Acoustic nerve
- C72.5 Cranial nerve, NOS
- C72.8 Overlapping lesion of brain and central nervous system
- C72.9 Nervous system, NOS

Some general morphology terms typical for these primary sites follow. This is not an exhaustive list -- just a guide based on the (ICD-O-2) site/histology combinations considered "passable without review" in edits run by the Central Brain Tumor Registry of the United States. The codes below are the corresponding ICD-O-3 codes.

Tumors of the Meninges (**C70._**)

chondroma / chondrosarcoma.....9220
chondrosarcoma, mesenchymal.....9240
fibrolipoma 8851
fibrosarcoma.....8810
granular cell tumor 9580
hemangioendothelioma 9130
hemangioma, cavernous.....9121
hemangiopericytoma.....9150
Letterer-Siwe disease 9754
lymphangioma, cystic 9173
melanoma 8720
meningioma 9530-9539
neuroectodermal tumor, peripheral.....9364

Tumors of Ventricles (**C71.5**)

astrocytoma, giant cell, subependymal..9384
craniopharyngioma.....9350
ependymoma..... 9393-9394
ganglioglioma 9505
ganglioneuromatosis.....9491
germ cell tumor, mixed.....9085
glioma, subependymal.....9383
granular cell tumor 9580
meningioma 9530-9537
neurocytoma 9506
neurofibroma, melanotic 9541
neurofibroma, plexiform.....9550
neuroma.....9570
neurothekeoma.....9562

Tumors of the Cerebellum (**C71.6)**

astrocytoma, giant cell, subependymal....9384
cyst, dermoid 9084
ependymoma 9393-9394
fibrosarcoma 8810
ganglioglioma.....9505
ganglioneuromatosis 9491
glioma, subependymal.....9383
hemangioblastoma 9161
hemangioendothelioma, epithelioid.....9133
hemangioma 9120-9122
lipoma.....8850
lymphoma, T-cell, peripheral.....9702
meningioma..... 9530-9537
mesenchymoma 8990
neurocytoma.....9506
neurofibroma, melanotic 9541
neurofibroma, plexiform.....9550
neuroma 9570
neurothekeoma 9562
paraganglioma 8680
rhabdomyosarcoma, embryonal.....8910

Tumors of the Brain, Cranial Nerves, and Spinal Cord (**C71.0-C71.4**, **C71.7-C71.9**, **C72.0-C72.5**)

angioendotheliomatosis....9680
astrocytoma, giant cell, subependymal..9384
chondroma / chondrosarcoma....9220
chondrosarcoma, mesenchymal....9240
chondrosarcoma, myxoid....9231
dysgerminoma....9060
endodermal sinus tumor....9071
ependymoma....9393-9394
fibrolipoma / liposarcoma....8851
fibroma, chondromyxoid....9241
ganglioneuromatosis....9491
germ cell tumor, mixed....9085
germinoma....9064
glioma, subependymal....9383
hemangioblastoma....9161
hemangioma....9120-9123
hemangioma, histiocytoid....9125
leiomyoma / leiomyosarcoma....8890
Letterer-Siwe disease....9754
lipoma, spindle cell....8857
lymphangioma, cystic....9173
lymphoma, large cell....9714
lymphoma, T-cell, angiocentric....9719
medulloblastoma....9470-9471
melanoma....8720
meningioma....9531-9538
neurocytoma....9506
neuroectodermal tumor....9364
neuroectodermal tumor, melanotic....9363
neurofibroma, melanotic....9541
neurofibroma, plexiform....9550
neuroma....9570
neurothekeoma....9562
osteoma / osteosarcoma....9180
pineoblastoma....9362
sarcoma, myeloid....9930
sarcomatosis, meningeal....9539
seminoma....9061
teratocarcinoma....9081
teratoma....9080

Tumors of "Other" Nervous System (**C72.8**, **C72.9**)

astrocytoma....9400
astrocytoma, anaplastic....9401
astrocytoma, fibrillary....9420
astrocytoma, giant cell, subependymal....9384
chondroma / chondrosarcoma....9220
ependymoma....9391
ganglioglioma....9505
ganglioneuromatosis....9491
glioblastoma....9440
glioma....9380
hemangioblastoma....9161
hemangioma, cavernous....9121
hemangiopericytoma....9150
lipoma / liposarcoma....8850
meningioma....9530-9537
neurocytoma....9506
neuroectodermal tumor, primitive....9473
neurofibroma, melanotic....9541
neurofibroma, plexiform....9550
neuroma....9570
neurothekeoma....9562
oligodendroglioma....9450
plasmacytoma....9731
sarcoma, Ewing....9260
smooth muscle tumor....8897
teratoma....9080

Identification of the Primary Neoplasm

To ensure the accurate reporting of cancer incidence in Massachusetts, it is essential that the primary neoplasm be identified accurately. The primary neoplasm is the original lesion, as opposed to a tumor that has developed as a result of extension or metastasis.

It is particularly important that metastatic lesions be distinguished from the primary lesion. Metastatic lesions are the result of the dissemination of tumor cells from the primary site to a remote part of the body. These new lesions do not represent primary tumors. Information regarding the nature of primary-versus-metastatic lesions is often found in pathology reports. The term "secondary" is often used to describe metastatic lesions.

Single-Versus-Multiple Primaries

To ensure consistency, the MCR has adopted the SEER rules and definitions for determining whether lesions are single or multiple primaries. As stated by SEER:

> ...the determination of how many primary neoplasms a patient has is, of course, a medical decision; but operational rules are needed to ensure consistent reporting by all participants. Basic factors include the site of origin, date of diagnosis, histologic type, behavior of the neoplasm (i.e., benign versus uncertain versus malignant) and laterality....In some neoplasms...one must be careful since different histologic terms are used to describe progressive stages or phrases of the same disease process.

In general, if there is a difference in the site where the neoplasms originate, then it is fairly easy to determine if they are separate primaries, regardless of dates of detection and histologic differences. Likewise, if there is a clear difference in histology, other data such as site and time of detection are not essential.

A separate case report (abstract) must be submitted for each independent primary neoplasm present at the time of admission, unless it was previously reported by your facility. Neoplasms identified only by history need not be abstracted for the MCR.

Definitions and rules governing the determination of single-versus-multiple primaries follow.

General Principle: Report a single primary or multiple primaries as documented by a physician, remembering that physicians need not adhere to the rules governing cancer registries. If physician determination is absent or unavailable, use the following guidelines.

Definitions Related to Single-Versus-Multiple Primaries

"Site Difference"

For the following, each topographic subcategory (4 characters) as delineated in ICD-O-3 is considered to be a separate site:

colon (C18._)
anus and anal canal (C21._)
bones, joints and articular cartilage (C40._, C41._)
peripheral nerves and autonomic nervous system (C47._)
connective, subcutaneous and other soft tissues (C49._)
nevi and melanomas of skin (C44._, 8720-8790)

Each site grouping shown in Table II.1 (page 17) is to be considered *one site* when determining single-versus-multiple primaries.

For all other sites, each topographic category (3 characters) as delineated in ICD-O-3 is considered to be a separate site.

Examples:

- Transverse colon (C18.4) and descending colon (C18.6) are to be considered separate sites.*
- Base of tongue (C01.9) and border of tongue (C02.1) are considered subsites of the tongue and are to be treated as one site -- either overlapping lesion of parts of the tongue (C02.8), or tongue, NOS (C02.9).
- Trigone of bladder (C67.0) and lateral wall of bladder (C67.2) are considered subsites of the bladder and are to be treated as one site -- either overlapping lesion of subsites of the bladder (C67.8), or bladder, NOS (C67.9).

***** Exceptions: colon polyps

1. *Simultaneous* (diagnoses made within 2 months of each other) lesions and polyps in the *same segment* of the colon are a single primary.
2. Polyps may present in more than one segment of the colon. If the diagnosis reads "adenocarcinoma in multiple polyps", it is one primary of the colon, NOS (C18.9).

Familial polyposis is a genetic disease characterized by polyps that increase in numbers and may cover the mucosal surface of the colon. This benign disease usually develops into adenocarcinoma in adenomatous polyposis coli (8220/3) or adenocarcinoma in multiple adenomatous polyps (8221/3).

Patients with the histologies "adenocarcinoma in adenomatous polyposis coli" (8220/3) and "adenocarcinoma in multiple adenomatous polyps" (8221/3) have a different disease process than those patients with frank adenocarcinoma of the colon or typical colon polyps. If multiple segments of the colon, or of the colon and rectosigmoid, or of the colon, rectosigmoid and rectum are involved with adenocarcinoma in adenomatous polyposis coli or adenocarcinoma in multiple adenomatous polyps, it is a single primary. Code the primary site to colon, NOS (C18.9).

"Histologic Type Difference"

Differences in histologic type refer to differences in the first 3 digits of the morphology code, except for lymphatic and hematopoietic diseases. (See **Multiple Primaries in Hematologic Diseases** on pages 21-27.)

"Simultaneous / Synchronous"

These terms describe diagnoses made within two months of each other.

Single Primaries

The following are to be considered single primaries:

- A single lesion of *one histologic type* is considered a single primary even if the lesion crosses site boundaries.
- A single lesion with *multiple histologic types* is to be considered a single primary.
- A new cancer with the *same histology* as an earlier one, if diagnosed in the **same site** within two months, is considered to be a single primary.
- Multiple lesions of the *same histologic type,* if diagnosed in the **same site** within two months, are to be considered a single primary; further, if one lesion has an *in situ* behavior (/2) and another an invasive behavior (/3), this is still to be considered a single primary whose behavior is invasive (/3).

Table II.1

ICD-O-3 Codes to be Considered ONE Primary Site When Determining Single-Versus-Multiple Primaries

ICD-O-3 Codes	Site Groupings
C01	base of tongue
C02	other and unspecified parts of tongue
C05	palate
C06	other and unspecified parts of mouth
C07	parotid gland
C08	other and unspecified major salivary glands
C09	tonsil
C10	oropharynx
C12	pyriform sinus
C13	hypopharynx
C23	gallbladder
C24	other and unspecified parts of biliary tract
C30	nasal cavity and middle ear
C31	accessory sinuses
C33	trachea
C34	bronchus and lung
C37	thymus
C38.0	heart
C38.1 - C38.3	mediastinum
C38.8	overlapping lesion of heart, mediastinum and pleura
C51	vulva
C52	vagina
C57.7	other specified parts of female genital organs
C57.8 - C57.9	overlapping lesion, female genital tract, NOS
C56	ovary
C57.0	fallopian tube
C57.1	broad ligament
C57.2	round ligament
C57.3	parametrium
C57.4	uterine adnexa
C60	penis
C63	other and unspecified male genital organs
C64	kidney
C65	renal pelvis
C66	ureter
C68	other and unspecified urinary organs
C74	adrenal gland
C75	other endocrine glands and related structures

Multiple Primaries

The following are to be considered separate primaries.

- Multiple lesions of the *same histologic type* that occur in **different sites** are considered separate primaries, unless stated to be metastatic.
- A new cancer of the *same histology* as an earlier one, if diagnosed in the **same site** after two months, should be considered a separate primary unless stated to be metastatic. Exceptions:
  - Bladder cancers (C67._) with histology codes 8120-8131 (transitional cell carcinomas, including (micro)papillary types): For these bladder cancers, a *single abstract is required for the first lesion only*. Any reappearance of disease in the bladder with histology codes 8120-8131 is to be considered a recurrence, regardless of the time that has passed since the initial diagnosis.
  - An *in situ* followed by an invasive cancer in the same site more than two months apart is reported as two primaries even if stated to be a recurrence.*
- Multiple lesions of *different histologic types* within a **single site** are considered separate primaries whether occurring simultaneously or at different times. Exceptions:
  - For multiple lesions within a single site occurring within two months, if one lesion is an NOS term (such as carcinoma, NOS; adenocarcinoma, NOS; or sarcoma, NOS) and the second lesion is a more specific term (such as large cell carcinoma, mucinous adenocarcinoma, or spindle cell sarcoma), consider this to be a single primary and code the more specific histology. The ONLY EXCEPTIONS to this are:
    - When both an adenocarcinoma (8140/3) and an adenocarcinoma (*in situ*) in a(n) (adenomatous) polyp (8210) or an adenocarcinoma (*in situ*) in a (tubulo)villous adenoma (8261, 8263) arise in the same segment of the colon or rectum, use the less specific code -- (8140/3).
    - When both a carcinoma (8010/3) and a carcinoma (*in situ*) in a(n) (adenomatous) polyp (8210) arise in the same segment of the colon or rectum, use the less specific code -- (8010/3).
- Multiple lesions of *different histologic types* in **different sites** are considered separate primaries whether occurring simultaneously or at different times.

* This is a SEER rule, adopted by the NAACCR Uniform Data Standards Committee, for diagnoses as of January 1, 1995. The ACoS/COC does not want the invasive case recorded if a physician has called it a recurrence, but as a central registry, the MCR follows SEER rules on this. You may choose to keep only the noninvasive case on your own data system, but make sure that the MCR receives a case report for the invasive diagnosis as well. Be sure to record the two separate Dates of Diagnosis for us.

Paired Organs (Laterality)

Each "side" of a paired organ (Appendix B) is a separate site, but if only *one histologic type* is reported and if **both sides** of a paired site are involved within two months of diagnosis, a determination must be made as to whether the patient has one or two independent primaries. If it is determined that there are two independent primaries, then two case reports should be sent to the MCR, each with appropriate laterality and staging.

If it is determined that there is only one primary, then laterality should be coded according to the side in which the cancer originated and a single case report should be submitted. If it is impossible to tell in which of the pair a single primary originated, Laterality (see page 76) should be coded as "**4**" and a single case report should be submitted.

There are three exceptions to this rule:

- Simultaneous bilateral involvement of the ovaries (C56.9) in which there is only a single histology is to be considered one primary, and Laterality is to be coded **4**.
- Simultaneous bilateral retinoblastomas (9510-9513) are always considered a single primary and Laterality is coded **4**.
- Simultaneous bilateral nephroblastomas (8960) are always considered a single primary and Laterality is coded **4**.

Breast Duct, Lobular, and Other Carcinomas

A single case report should be prepared for certain combinations of multiple separate carcinomas occurring in the **same breast** within two months of each other, even though they may have different histologies (i.e., a difference in the first three characters of the morphology codes). ICD-O-3 lists the morphology codes 8522, 8523 and 8524* for these combinations. If all the tumors are *in situ,* the behavior code should be /2; but if any part of a tumor is invasive, the behavior code must be /3. Some examples follow:

* Like any other "combination" morphology code, these codes may also be assigned to a single lesion having multiple histologic subtypes. Use 8523 when there is a diagnosis of duct carcinoma mixed with another carcinoma or more than one subtype of duct carcinoma, such as duct carcinoma with elements of cribriform carcinoma, or duct carcinoma mixed with mucinous carcinoma. The same principle applies for 8524 when one of the histologies is lobular carcinoma. Although there are no equivalent terms specifically listed under 8524/3 in ICD-O-3, the "other types of carcinoma" with which the lobular carcinoma is mixed can include histologies such as mucinous, tubular, cribriform and/or solid. Bear in mind that if all parts of a tumor are *in situ*, the behavior code /2 should be used; but if any part of the tumor is invasive, the behavior code must be /3.

- Infiltrating duct carcinoma (8500/3) and lobular carcinoma (8520/3) -- Code as 8522/3.
- Infiltrating duct carcinoma (8500/3) and lobular carcinoma *in situ* (8520/2) -- Code as 8522/3.
- Intraductal carcinoma (8500/2) and lobular carcinoma (8520/3) -- Code as 8522/3.
- Intraductal carcinoma (8500/2) and lobular carcinoma *in situ* (8520/2) -- Code as 8522/2.
- Infiltrating duct carcinoma (8500/3) and tubular carcinoma (8211/3) -- Code as 8523/3.
- Infiltrating lobular carcinoma (8520/3) and colloid carcinoma (8480/3) -- Code as 8524/3.

Separate case reports should be sent for a lesion in one breast and an unrelated lesion in the **other breast** having **different histologies**, whether or not they occur within two months of each other.

Separate case reports should be sent for two lesions in the **same breast** diagnosed more than two months apart.

(Intra)ductal Carcinoma and Paget Disease

The single morphology code 8543/3 should be used for a combination of intraductal carcinoma (8500/2) and Paget disease of the breast (8540/3). Code 8541/3 should be used for a combination of Paget disease of the breast (8540/3) and duct carcinoma (8500/3).

Kaposi Sarcoma

Kaposi sarcoma (9140/3) is reported only once for a patient. Kaposi sarcoma is coded to the site in which it first arises. If Kaposi sarcoma arises in skin and another site simultaneously, code to skin (C44._). If no primary site is stated, code to skin, NOS (C44.9).

Hematologic Diseases

Table II.2 (pages 24-27) is used to help determine single/multiple primaries of hematologic diseases. The inserted fold-out table is identical to the typed Table II.2, except the typed version labels the rows and columns with histologic type codes only, and the code 9699 is listed numerically as a separate row/column in Table II.2.

To compare two diagnoses:

1. assign the best ICD-O-3 histologic type code to each;
2. find the code of the first diagnosis in the row headings;
3. find the code of the second diagnosis in the column headings;
4. find the intersection of that row and column;
   - a **S** in the intersection indicates that the two diagnoses are considered parts of the **s**ame disease process, and are a single primary;
   - a **D** in the intersection indicates that they are considered **d**ifferent disease processes and are two separate primaries.

Examples (see page 24):

- first diagnosis -- lymphoma, NOS (9590)
  second diagnosis -- Hodgkin lymphoma, mixed cellularity (9652)
  The **S** at the intersection of row "9590" and column "9650-9667" indicates that this would be considered one primary.
- first diagnosis -- multiple myeloma (9732)
  second diagnosis -- lymphoma, NOS (9590)
  The **D** at the intersection of row "9731-9734" and column "9590" indicates that these would be considered separate primaries.

Rules and Guidelines:

1. Primary site (topography) is not to be considered in determining single/multiple primaries of hematologic malignancies. Only the histologic types matter.

   Example: A patient has a lymphoma arising in lymph nodes and an extranodal lymphoma. You need to determine the two histologic types and use Table II.2 to determine if these are different diseases; the difference in primary sites is irrelevant.

2. The time interval between diagnoses is not to enter into the decision. Two lymphomas diagnosed years apart could be considered a single primary.

3. The sequence (chronological order) of diagnoses may affect single-versus-multiple primary decisions. Always be careful to look for the earlier diagnosis code down the row labels of the table, and for the more recent diagnosis code across the top column labels.

   Examples: A patient is diagnosed with composite Hodgkin and non-Hodgkin lymphoma (9596) in January 2001, and with lymphoid leukemia (9820) in December 2001. This is a single primary (**S**) (9596), diagnosed in January.

   A patient is diagnosed with lymphoid leukemia (9820) in January 2001, and with composite Hodgkin and NHL (9596) in December 2001. The December diagnosis is a new (**D**) primary.

4. Table II.2 contains only ICD-O-3 codes. It should be used to compare diagnoses made in 2001 and thereafter; it should also be used to compare a diagnosis made before 2001 with one made in 2001 or thereafter. When comparing a pre-2001 diagnosis with a diagnosis made in 2001+, remember to look in the row headings for the best ICD-O-3 code equivalent to the pre-2001 diagnostic term.

   Example: A patient was diagnosed in 1999 with "chronic myelomonocytic leukemia" (ICD-O-2 code 9868, ICD-O-3 code 9945). In 2001 the patient is diagnosed with "myeloid sarcoma" (ICD-O-3 code 9930). Using the ICD-O-3 codes and Table II.2, the intersection of row "9945" and column "9930" contains **S**, so this is a single primary (diagnosed in 1999, so be sure that the ICD-O-2 code 9868 gets assigned to this case).

   When comparing two pre-2001 diagnoses, you should use the old ICD-O-2 version of Table II.2 to decide if these would have been considered the same or different diseases at diagnosis. (See the ROADS or previous MCR coding manual for the ICD-O-2 tables.)

5. When two diagnoses are considered to be the same disease process (**S**), and one is an "NOS" term while the other is more specific, assign the more specific diagnosis code to the single primary regardless of the chronological order of the diagnoses.

   Example: first diagnosis -- lymphoma, NOS (9590)
   second diagnosis --Hodgkin lymphoma, mixed cellularity (9652)

   This single primary will have the diagnosis date of the *first* diagnosis and the histologic type code of the *second* diagnosis because the first term is "NOS".

6. "Lymphoma" is a general term for solid malignancies of the lymphoid series of the hematologic diseases. "Leukemia" is a general term for liquid malignancies of the lymphoid or myeloid series. Because so many hematologic diseases can potentially arise as leukemias or lymphomas or both, all such malignancies are assumed to have the potential to appear in both forms.
7. Malignancies of the lymphoid series are to be considered different diseases from those of the myeloid series; and histiocytic malignancies are considered different diseases from those of both the lymphoid and myeloid series.
8. Hodgkin lymphoma is considered to be different from non-Hodgkin lymphoma. Among non-Hodgkin lymphomas, B-cell malignancies are to be considered different diseases from T-cell and NK cell malignancies.

Table II.2: Single ("S") vs. Subsequent ("D") Primaries for Lymphatic and Hematologic Diseases

Earlier Diagnosis ↓ ↓ ↓ ↓ ↓ / Later Dx →	9590	9591	9596	9650 - 9667	9670 - 9671	9673	9675 - 9684	9687	9689	9690 - 9698	9699	9700, 9701
9590	S	S	S	S	S	S	S	S	S	S	S	S
9591	S	S	D	D	S	S	S	S	S	S	S	S
9596	S	S	S	S	S	S	S	S	S	S	S	S
9650 - 9667	S	D	D	S	D	D	D	D	D	D	D	D
9670 - 9671	S	S	D	D	S	D	S	D	D	D	D	D
9673	S	S	D	D	D	S	D	D	D	D	D	D
9675 - 9684	S	S	D	D	S	D	S	S	D	S	D	D
9687	S	S	D	D	D	D	D	S	D	D	D	D
9689	S	S	D	D	D	D	D	D	S	D	S	D
9690 - 9698	S	S	D	D	D	D	S	D	D	S	D	D
9699	S	S	D	D	D	D	D	D	S	D	S	D
9700, 9701	S	S	D	D	D	D	D	D	D	D	D	S
9702 - 9719	S	S	D	D	D	D	D	D	D	D	D	D
9727	S	S	D	D	D	D	D	D	D	D	D	D
9728	S	S	D	D	D	D	D	D	D	D	D	D
9729	S	S	D	D	D	D	D	D	D	D	D	D
9731 - 9734	D	D	D	D	D	D	D	D	D	D	D	D
9740 - 9742	D	D	D	D	D	D	D	D	D	D	D	D
9750 - 9756	D	D	D	D	D	D	D	D	D	D	D	D
9757, 9758	S	S	D	D	D	D	D	D	D	D	D	D
9760	S	S	D	D	S	D	S	D	D	D	D	D
9761	S	S	D	D	S	D	S	D	D	D	D	D
9762	S	S	D	D	D	D	D	D	D	D	D	D
9764	S	S	D	D	D	D	D	D	D	D	D	D
9800, 9801	S	S	D	D	D	D	D	S	D	D	D	D
9805	S	S	D	D	S	S	S	S	S	S	S	S
9820	S	S	D	D	D	D	D	S	D	S	D	S
9823	S	S	D	D	S	D	S	D	D	D	D	D
9826	S	S	D	D	D	D	D	S	D	D	D	D
9827	S	S	D	D	D	D	D	D	D	D	D	D
9832	D	D	D	D	S	D	D	D	D	D	D	D
9833	D	D	D	D	S	D	D	D	D	D	D	D
9834	D	D	D	D	D	D	D	D	D	D	D	D
9835	S	S	D	D	D	D	D	D	D	D	D	D
9836	S	S	D	D	D	D	D	D	D	D	D	D
9837	S	S	D	D	D	D	D	D	D	D	D	D
9840 - 9910	D	D	D	D	D	D	D	D	D	D	D	D
9920	D	D	D	D	D	D	D	D	D	D	D	D
9930	D	D	D	D	D	D	D	D	D	D	D	D
9931	D	D	D	D	D	D	D	D	D	D	D	D
9940	D	D	D	D	D	D	D	D	D	D	D	D
9945	D	D	D	D	D	D	D	D	D	D	D	D
9946	D	D	D	D	D	D	D	D	D	D	D	D
9948	S	S	D	D	D	D	D	D	D	D	D	D
9950	D	D	D	D	D	D	D	D	D	D	D	D
9960	D	D	D	D	D	D	D	D	D	D	D	D
9961	D	D	D	D	D	D	D	D	D	D	D	D
9962	D	D	D	D	D	D	D	D	D	D	D	D
9963	D	D	D	D	D	D	D	D	D	D	D	D
9964	D	D	D	D	D	D	D	D	D	D	D	D
9980 - 9986	D	D	D	D	D	D	D	D	D	D	D	D
9987	D	D	D	D	D	D	D	D	D	D	D	D
9989	D	D	D	D	D	D	D	D	D	D	D	D

Table II.2: Single ("S") vs. Subsequent ("D") Primaries for Lymphatic and Hematologic Diseases

Earlier Diagnosis ↓ ↓ ↓ ↓ ↓ / Later Dx →	9702-9719	9727	9728	9729	9731-9734	9740-9742	9750-9756	9757, 9758	9760	9761	9762	9764
9590	S	S	S	S	S	S	S	S	S	S	S	S
9591	S	S	S	S	D	D	D	S	S	S	S	S
9596	S	S	S	S	D	D	D	D	S	S	S	S
9650 - 9667	D	D	D	D	D	D	D	D	D	D	D	D
9670 - 9671	D	D	D	D	D	D	D	D	D	S	D	D
9673	D	D	D	D	D	D	D	D	D	D	D	D
9675 - 9684	D	D	D	D	D	D	D	D	S	S	S	S
9687	D	D	D	D	D	D	D	D	D	D	D	D
9689	D	D	D	D	D	D	D	D	D	D	D	D
9690 - 9698	D	D	D	D	D	D	D	D	D	D	D	D
9699	D	D	D	D	D	D	D	D	D	D	D	D
9700, 9701	D	D	D	D	D	D	D	D	D	D	D	D
9702 - 9719	S	D	D	D	D	D	D	D	S	D	D	D
9727	D	S	S	S	D	D	D	D	D	D	D	D
9728	D	S	S	D	D	D	D	D	D	D	D	D
9729	D	S	D	S	D	D	D	D	D	D	D	D
9731 - 9734	D	D	D	D	S	D	D	D	D	D	D	D
9740 - 9742	D	D	D	D	D	S	D	D	D	D	D	D
9750 - 9756	D	D	D	D	D	D	S	D	D	D	D	D
9757, 9758	D	D	D	D	D	D	D	S	D	D	D	D
9760	D	D	D	D	S	D	D	D	S	S	S	S
9761	D	D	D	D	D	D	D	D	S	S	D	D
9762	D	D	D	D	D	D	D	D	S	D	S	S
9764	D	D	D	D	S	D	D	D	S	D	S	S
9800, 9801	S	S	S	S	D	D	D	D	D	D	D	D
9805	S	S	S	S	D	D	D	D	D	D	D	D
9820	S	S	S	S	D	D	D	D	S	S	S	D
9823	D	D	D	D	D	D	D	D	S	D	D	D
9826	D	D	D	D	D	D	D	D	D	D	D	D
9827	D	D	D	D	D	D	D	D	D	D	D	D
9832	D	D	D	D	D	D	D	D	D	D	D	D
9833	D	D	D	D	D	D	D	D	D	D	D	D
9834	D	D	D	D	D	D	D	D	D	D	D	D
9835	D	S	S	S	D	D	D	D	D	D	D	D
9836	D	S	S	D	D	D	D	D	D	D	D	D
9837	D	S	D	S	D	D	D	D	D	D	D	D
9840 - 9910	D	D	D	D	D	D	D	D	D	D	D	D
9920	D	D	D	D	D	D	D	D	D	D	D	D
9930	D	D	D	D	D	D	D	D	D	D	D	D
9931	D	D	D	D	D	D	D	D	D	D	D	D
9940	D	D	D	D	D	D	D	D	D	D	D	D
9945	D	D	D	D	D	D	D	D	D	D	D	D
9946	D	D	D	D	D	D	D	D	D	D	D	D
9948	S	D	D	D	D	D	D	D	D	D	D	D
9950	D	D	D	D	D	D	D	D	D	D	D	D
9960	D	D	D	D	D	D	D	D	D	D	D	D
9961	D	D	D	D	D	D	D	D	D	D	D	D
9962	D	D	D	D	D	D	D	D	D	D	D	D
9963	D	D	D	D	D	D	D	D	D	D	D	D
9964	D	D	D	D	D	D	D	D	D	D	D	D
9980 - 9986	D	D	D	D	D	D	D	D	D	D	D	D
9987	D	D	D	D	D	D	D	D	D	D	D	D
9989	D	D	D	D	D	D	D	D	D	D	D	D

Table II.2: Single ("S") vs. Subsequent ("D") Primaries for Lymphatic and Hematologic Diseases

Earlier Diagnosis ↓ ↓ ↓ ↓ / Later Dx	9800, 9801	9805	9820	9823	9826	9827	9832	9833	9834	9835	9836	9837	9840-9910	9920
9590	S	S	S	S	S	S	S	S	S	S	S	S	S	S
9591	S	S	S	S	S	S	D	D	D	S	S	S	D	D
9596	S	D	S	S	S	S	D	D	D	S	S	S	D	D
9650 - 9667	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9670 - 9671	D	S	S	S	D	D	S	S	D	D	D	D	D	D
9673	D	S	D	D	D	D	D	D	D	D	D	D	D	D
9675 - 9684	D	S	S	S	D	D	S	S	D	D	D	D	D	D
9687	S	S	S	D	S	D	D	D	D	D	D	D	D	D
9689	D	S	D	D	D	D	D	D	D	D	D	D	D	D
9690 - 9698	D	S	D	D	D	D	D	D	D	D	D	D	D	D
9699	D	S	D	D	D	D	D	D	D	D	D	D	D	D
9700, 9701	D	S	S	D	D	D	D	D	D	D	D	D	D	D
9702 - 9719	D	S	S	D	D	D	D	D	D	D	D	D	D	D
9727	S	S	S	D	D	D	D	D	D	S	S	S	D	D
9728	S	S	S	D	D	D	D	D	D	S	S	D	D	D
9729	S	S	S	D	D	D	D	D	D	S	D	S	D	D
9731 - 9734	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9740 - 9742	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9750 - 9756	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9757, 9758	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9760	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9761	D	D	S	S	D	D	D	D	D	D	D	D	D	D
9762	D	D	S	S	D	D	D	D	D	D	D	D	D	D
9764	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9800, 9801	S	S	S	D	S	S	D	D	D	S	S	S	S	S
9805	S	S	S	S	S	S	S	S	S	S	S	S	S	S
9820	S	S	S	S	S	S	S	S	S	S	S	S	D	D
9823	D	S	S	S	D	D	S	S	D	D	D	D	D	D
9826	S	S	S	D	S	D	D	D	D	D	D	D	D	D
9827	D	S	S	D	D	S	D	D	D	D	D	D	D	D
9832	D	S	S	S	D	D	S	S	S	D	D	D	D	D
9833	D	S	S	S	D	D	S	S	D	D	D	D	D	D
9834	D	S	S	D	D	S	S	D	S	D	D	D	D	D
9835	S	S	S	D	D	D	D	D	D	S	S	S	D	D
9836	S	S	S	D	D	D	D	D	D	S	S	D	D	D
9837	S	S	S	D	D	D	D	D	D	S	D	S	D	D
9840 - 9910	S	S	D	D	D	D	D	D	D	D	D	D	S	S
9920	S	S	D	D	D	D	D	D	D	D	D	D	S	S
9930	S	S	D	D	D	D	D	D	D	D	D	D	S	S
9931	S	S	D	D	D	D	D	D	D	D	D	D	S	S
9940	S	S	D	D	D	D	D	D	D	D	D	D	D	D
9945	S	S	D	D	D	D	D	D	D	D	D	D	S	S
9946	S	S	D	D	D	D	D	D	D	D	D	D	S	S
9948	S	S	S	D	D	D	D	D	D	D	D	D	D	D
9950	S	D	D	D	D	D	D	D	D	D	D	D	D	D
9960	S	S	D	D	D	D	D	D	D	D	D	D	S	S
9961	S	S	D	D	D	D	D	D	D	D	D	D	S	S
9962	S	D	D	D	D	D	D	D	D	D	D	D	S	S
9963	S	D	D	D	D	D	D	D	D	D	D	D	S	S
9964	S	D	D	D	D	D	D	D	D	D	D	D	S	S
9980 - 9986	S	S	D	D	D	D	D	D	D	D	D	D	S	S
9987	S	S	D	D	D	D	D	D	D	D	D	D	S	S
9989	S	S	D	D	D	D	D	D	D	D	D	D	S	S

Table II.2: Single ("S") vs. Subsequent ("D") Primaries for Lymphatic and Hematologic Diseases

Earlier Diagnosis ↓ ↓ ↓ ↓ / Later Dx →	9930	9931	9940	9945	9946	9948	9950	9960	9961	9962	9963	9964	9980-9986	9987	9989
9590	S	S	S	S	S	S	D	D	D	D	D	D	D	D	D
9591	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9596	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9650 - 9667	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9670 - 9671	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9673	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9675 - 9684	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9687	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9689	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9690 - 9698	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9699	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9700, 9701	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9702 - 9719	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9727	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9728	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9729	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9731 - 9734	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9740 - 9742	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9750 - 9756	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9757, 9758	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9760	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9761	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9762	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9764	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9800, 9801	S	D	D	S	S	D	D	S	S	D	S	S	D	S	S
9805	S	S	S	S	S	S	D	S	S	D	D	D	S	S	S
9820	D	D	S	D	D	S	D	D	D	D	D	D	D	D	D
9823	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9826	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9827	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9832	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9833	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9834	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9835	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9836	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9837	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9840 - 9910	S	S	D	S	S	D	D	S	S	S	S	S	D	S	S
9920	S	S	D	S	S	D	D	D	S	D	D	D	D	S	S
9930	S	S	D	S	S	D	D	S	S	S	S	D	D	S	S
9931	S	S	D	S	S	D	D	D	S	D	D	D	D	S	S
9940	D	D	S	D	D	D	D	D	D	D	D	D	D	D	D
9945	S	S	D	S	S	D	D	S	S	D	S	D	D	S	S
9946	S	S	D	S	S	D	D	D	S	D	D	D	D	S	S
9948	D	D	D	D	D	S	D	D	D	D	D	D	D	D	D
9950	D	D	D	D	D	D	S	S	S	D	D	D	D	D	D
9960	S	S	D	S	D	D	D	S	S	S	S	D	D	D	D
9961	S	S	D	S	S	D	D	S	S	S	S	D	D	S	S
9962	S	S	D	S	D	D	D	S	S	S	S	D	D	D	D
9963	S	S	D	S	D	D	D	S	S	S	S	D	D	D	D
9964	S	S	D	S	S	D	D	S	S	D	D	S	D	D	D
9980 - 9986	S	S	D	S	S	D	D	S	S	D	D	D	S	S	S
9987	S	S	D	S	S	D	D	S	S	D	D	D	S	S	S
9989	S	S	D	S	S	D	D	S	S	D	D	D	S	S	S

Differences in Reportability Between ICD-O-2 and ICD-O-3

The year of diagnosis determines coding and other data standards for case reporting.* If a case was first diagnosed before 2001 and was reportable to the MCR under ICD-O-2 coding, then that case is reportable to the MCR regardless of when you abstract and report the case. If a case was first diagnosed before 2001 and was *not* reportable under ICD-O-2 coding, then it is *not* reportable. If a case was first diagnosed in 2001 or thereafter, then only its ICD-O-3 coding determines whether or not it is reportable.

Examples: Refractory anemia first diagnosed in 2000 and first seen at your facility in 2002 -- case is *not* reportable because the ICD-O-2 code is 9980/1. Had the case been first diagnosed in 2001, it *would* be reportable.

Serous cystadenoma, borderline malignancy, diagnosed in 2001 -- case is *not* reportable because the ICD-O-3 code is 8442/1. Had the case been diagnosed before 2001, it *would* be reportable.

Chronic myeloproliferative disease first diagnosed before 2001 is *not* reportable because its ICD-O-2 code is 9960/1. The same disease first diagnosed in 2001 *would* be reportable because its ICD-O-3 code is 9960/3.

Myeloproliferative disease, *NOS* (9960/1 in ICD-O-2 and 9975/1 in ICD-O-3) is *not* reportable under either pre-2001 or 2001+ rules.

Remember that, in North America, coding rules state that 9421/1 pilocytic astrocytomas diagnosed in 2001 and thereafter should be reported with the ICD-O-3 morphology code changed to 9421/**3**. Such cases are reportable to the MCR even with the /1 code because of our brain/CNS tumor collection rules, but please remember to change the Behavior Code to /3 when reporting histologic type code 9421. SEER, the ACoS/COC, NAACCR and CDC/NPCR agree on this rule.

* If the year of diagnosis is unknown to you, try to estimate it. If you cannot estimate the diagnosis year, use the "Date of First Contact" year (the year of your facility's first contact with the patient for this case, or "Year First Seen for This Primary") to determine which coding rules pertain.

Negative Biopsies

Cases in which a positive cytology is followed by a negative biopsy must be carefully evaluated. The case should not be reported if the biopsy rules out the presence of cancer; if a negative biopsy does *not* rule out cancer, the case is considered cytologically confirmed and it should be reported. (Also see the "suspicious cytology" notes on page 10.)

Pathology-Only and Consultation-Only Cases

Cases diagnosed by a hospital pathology department strictly on the basis of slides or specimens submitted from outside the facility (without the patient being seen there), and cases seen for consultation-only should not be included in regular data submissions to the MCR. It is important, however, that the MCR be made aware of such cases to ensure that all reportable cancers in Massachusetts have been recorded. Therefore, the MCR requests (*not* a requirement) that you submit pathology-only and consult-only cases separately from regular data submissions.

You may submit **pathology-only** cases on a separate diskette that is clearly labeled "Path-Only", or (if necessary) on paper. You need not try to fill each of the data fields collected by the MCR with specific information. At a minimum, you should include the:

- patient's name
- date of birth
- primary site
- morphology
- ordering physician's name

It would be extremely helpful if you could also include the patient's Social Security number and the pathology specimen's collection date. Any additional patient identifiers or tumor information will be greatly appreciated.

The MCR will check that a complete case for each of these patients has been reported by someone. If we have no corresponding case on file, the MCR will try to follow back to the diagnosing physician to obtain the additional information needed to include the case in our database.

It may be difficult to identify a **consultation-only** case. As a general guideline, the MCR suggests determination of who is responsible for the treatment decisions and follow-up of the patient: if the reporting hospital is responsible, a case report should be submitted; if the reporting hospital is merely confirming a diagnosis made elsewhere, rendering a second opinion, or recommending treatment to be delivered and managed elsewhere, a case report is not required but, as noted above, the MCR *requests* that we be notified of the case in a separate data submission.

Cases of **Class 6** are not required, but IF your facility chooses to collect Class 6 cases, they should be sent to the MCR along with your *regular* cases (analytic and nonanalytic). It may be difficult to distinguish pathology-only cases from some Class 6 cases (diagnosis and entire first course of treatment in the office of a physician on your medical staff). The physician office should be able to help identify which cases are truly Class 6* (see pages 96-97 for Class definitions). The basic question to ask about these types of cases is, "If I don't report this case to the MCR, will it never be reported at all?" If no hospital diagnosed or helped treat the patient, then you may be our only source of information.

Whenever there is doubt about whether or not to submit a particular case, consult MCR Data Acquisition Supervisor (Mary Jane King) at 617-624-5622.

* If the case under consideration is truly a Class 6 case, then we require that the patient demographics (including the patient's address) be filled in along with the patient identifiers and tumor information (as for any nonanalytic case). True Class 6 cases should be included in your regular MCR data submissions. Do *not* include true Class 6 cases in a file of pathology-only / consult-only cases.

SECTION III - PATIENT INFORMATION

Facility Name (not a standard field in NAACCR Version 9.1)

This field is not *collected* from you in each case record. Our data system assigns a reporting facility name to each record when it is uploaded. When sending cases to us on diskette, please include the facility name on each diskette label. This also helps us organize diskette storage.

Facility Code NAACCR Version 9.1 field "Registry ID", Item 40, columns 189-203

This field should contain your ACoS/COC Facility Identification Number (FIN), but the special code assigned to your facility by the MCR (usually four digits) is also acceptable if your data system can produce it (see next page for MCR codes). Facilities reporting on diskette should include their MCR Code on each diskette label.

Example: Hospital A's registry may send its COC Facility Identification Number ending with "148765", *or* its MCR Code "2002". The diskette label should include "2002".

Accession Number NAACCR Version 9.1 field "Accession Number--Hosp", Item 550, columns 286-294

This unique number identifies a patient at your facility based on when s/he was first accessioned onto your data system. The first four digits are the year in which the patient was first seen at your facility for the diagnosis and/or treatment of cancer, after your registry's reference date. The last five digits represent the numeric order in which you entered the case into your system. All of a patient's cases (primaries) should have the same Accession Number on your system.

Example: A patient's first diagnosis at your facility is in 2001, and this is the 23rd patient accessioned in 2001. The Accession Number is **200100023**. The patient has another primary diagnosed in 2002 for which you provide chemotherapy. The second case's Accession Number is also **200100023**.

If a patient is deleted from your data system, do not re-use the Accession Number that had been assigned. If your facility uses non-standard formatting for Accession Numbers, that is fine with the MCR because we only use this field to help identify the patient when we communicate with you. If your facility does not use Accession Numbers or has not assigned one to a particular patient, you may leave this field empty.

PATIENT INFORMATION cont.

These are the "MCR" codes and full ACoS FIN codes (source: ACoS website and a vendor) for facilities regularly reporting cases to us as of August 2001. (The facility name that appears below is not the official name of each institution; it's just a simple identifier for use in this table.)

Facility (short name)	MCR Code	FIN
Anna Jaques	2006	0006141500
Athol	2226	0006140065
Baystate	2339	0006141955
Berkshire	2313	0006141705
Beth Israel Deaconess	2069	0006140170
Beverly	2007	0006140130
Boston Med. Ctr	2084	0006140440
Brigham & Women's	2341	0006140218
Brockton	2118	0006140630
Cambridge	2108	0006140730
Cape Cod	2135	0006141130
Carney	2003	0006140255
Charlton	2337	0006140905
Children's DFCI	2139	0006140270
Clinton	2126	0006140840
Cooley Dickinson	2155	0006141570
Dana Farber	2335	0006140583
Deaconess-Glover	2054	0006141450
Deaconess-Nashoba	2298	0006140090
Deaconess-Waltham	2067	0006142090
Emerson	2018	0006140850
Fairview	2052	0006141010
Falmouth	2289	0006140923
Faulkner	2048	0006140310
Franklin	2120	0006141020
Good Samaritan	2101	0006140631
Hale	2131	0006141080
Harrington	2143	0006141890
Health Alliance	2127	0006141190
Heywood	2036	0006140980
Holy Family	2225	0006141355
Holyoke	2145	0006141110
Hubbard	2157	0006142130
Jordan	2082	0006141720
Lahey	2342	0006140690
Lawrence General	2099	0006141170
Lawrence Memorial	2038	0006141330
Lemuel Shattuck	2821	not applicable
Lowell General	2040	0006141200
Malden	2041	0006141280
Marlborough	2103	0006141300
Martha's Vineyard	2042	0006141640
Mary Lane	2148	0006142100
Mass. General	2168	0006140430
Melrose-Wakefield	2058	0006141340
Mercy	2149	0006141940
MetroWest	2020	0006140960
Milford-Whitinsville	2105	0006141395
Milton	2227	0006141410
Morton	2022	0006142000
Mt. Auburn	2071	0006140780
Nantucket	2044	0006141430
New England Baptist	2059	0006140460
New England Med. Ctr	2299	0006140465
Newton-Wellesley	2075	0006141530
Noble	2076	0006142200
North Adams	2061	0006141560
North Shore	2014	0006141820
Norwood	2114	0006141630
Quincy	2151	0006141740
St. Anne's	2011	0006140900
St. Elizabeth's	2085	0006140620
St. Luke's	2010	0006141460
St. Vincent's	2128	0006142350
Saints Memorial	2029	0006141220
Somerville	2001	0006141860
South Shore	2107	0006141900
Sturdy	2100	0006140080
Tobey	2106	0006142110
UMass. Med. Ctr	2841	0006142355
Union Atlanticare	2073	0006141260
VA	2985	0006140570
Whidden	2046	0006140880
Winchester	2094	0006142280
Wing	2181	0006141660

Sequence Number--Hospital

NAACCR Version 9.1 Item 560, columns 295-296

Sequence Number represents the chronological order of a patient's neoplasms during his/her lifetime, whether they exist at the same or at different times, and whether or not they are entered in the reporting facility's registry.

Malignant Tumors

Codes for **malignant primaries** (Behavior Code **2** or **3**) are as follows:

Tumor Sequence	**Code**
1 primary malignancy only	**00**
first of 2 or more malignant primaries	**01**
second of 2 or more malignant primaries	**02**
third of 3 or more malignant primaries	**03**
(actual number of subsequent primary)	**...**
twenty-fifth of 25 malignant primaries	**25**
*unknown	**99***

* This code is only to be used when there is a substantial reason to believe that the patient had a previous malignancy, but it is not *definitely* known. If, however, the patient has undergone a procedure that *might have been* for cancer, but there is no substantial reason for assuming that it *was* for cancer, do not enter code **99**. For example, in the absence of specific information indicating cancer, a previous hysterectomy or the removal of a rectosigmoid polyp would not be sufficient reason for entering code **99**.

Sequence code **00** indicates that the patient has only one primary malignancy. The sequence code for this case should be changed from **00** to **01** if the patient develops a second primary malignancy. Sequence code **01** indicates that the case is the first of multiple primaries.

Example: In January 1998, the hospital registry assigns Sequence Number **00** to a primary colon cancer case. This patient develops a second primary cancer, of the pancreas, in October 2001. Assign Sequence Number **02** to the second (pancreatic) cancer, and change the Sequence Number of the first (colon) cancer to **01**.

No codes between **25** and **99** are allowed in this field.

Nonmalignant Tumors (Benign, Borderline, Uncertain Behavior)

Codes for **nonmalignant tumors** (Behavior Code **0** or **1**) are as follows:

Tumor Sequence	Code
1 benign tumor only; or the first of 2 or more nonmalignant tumors	**AA**
second of 2 or more nonmalignant tumors	**BB**
third of 3 or more nonmalignant tumors	**CC**
(letters representing actual number of subsequent nonmalignant tumor)	**...**
unspecified number of nonmalignant tumors	**XX**

The nonmalignant sequence code does not affect the malignant sequence code -- they are independent.

Example: A patient develops colon cancer in 1995. The Sequence Number is **00**. The patient develops a benign meningioma in 2001. Meningiomas are reportable-by-agreement in the reporting facility (and reportable to the MCR), so the registry assigns the Sequence Number **AA** (one benign tumor only). The Sequence Number for the first primary (colon) remains **00**.

You should sequence tumors according to the rules of your facility's registry. The MCR assigns its own Sequence Numbers in a separate field on our system according to our own registry's rules.

Example: A patient's first neoplasm is a regionalized basal cell skin cancer; the second is a benign brain tumor; the third is a lung carcinoma. If your facility collects regionalized skin cancers, you will assign a Sequence Number **01** to that case even though it will not be reported to the MCR. You will send the MCR the benign brain tumor sequenced **AA** and the lung cancer sequenced **02**. We will assign our own Sequence Numbers to these two cases in a separate field ("Sequence Number--Central" in the NAACCR record layout.)

When malignancies are diagnosed simultaneously, assign the lower (smaller) Sequence Number to the primary with the worse prognosis. When the prognoses are alike, the assignment of a Sequence Number is arbitrary.

Examples: A patient is diagnosed with simultaneous carcinoma *in situ* of a vocal cord and invasive adenocarcinoma of the colon. Assign Sequence Number **01** to the invasive primary and **02** to the *in situ* case.

A patient has simultaneous adenocarcinoma *in situ* in a colon polyp and squamous cell carcinoma *in situ* in a vocal cord polyp. Assign Sequence Numbers as you choose because both cases have similar prognoses.

The Sequence Number counts the patient's primaries. When multiple institutions treat a patient, the Sequence Number of each case should be the same at each institution if both facilities follow the same reportability rules and are aware of the patient's cancer history.

Example: The reporting facility diagnoses a patient with lung cancer. The patient has a history of colon cancer that was diagnosed and treated elsewhere. The lung cancer is known to be the second of this patient's cases, so assign a Sequence Number of **02** to the lung cancer.

PLEASE -- If you know that a patient had or has a cancer(s) in addition to the particular case you're reporting to us, record in the "Comments/Narrative Remarks" field any important information you know about the diagnoses and diagnosis dates of these other cases. This information helps the MCR match and link patient and tumor data from multiple facilities, and its inclusion will mean fewer telephone calls to your registry when we are trying to understand the patient's cancer history and resolve case sequencing. For example, the Comments field might say "breast cancer 1990; bladder TCC June 1993".

Sequence Number--Central

NAACCR Version 9.1 Item 380, columns 217-218

This field is not collected from you. It is generated at the MCR and is used in running several automated edit checks on our cases. This field may differ from your Hospital Sequence Number code, and it has different data standards than the Hospital field (its codes are only numeric, codes up to **35** are valid, and a special code **98** may be used for cervical carcinomas *in situ* diagnosed after 1995). This field enables us to sequence cases as we wish at the central registry, while allowing you to sequence them as *you* wish at your facility.

Year First Seen for This Primary

NAACCR Version 9.1 field "Year First Seen This Ca", Item 620, columns 325-328

Enter the year during which the patient was first seen *at your facility* for the diagnosis or treatment of the neoplasm being reported. It is not necessarily the year that you accessioned the case. "Year First Seen for *This* Primary" relates only to *one* primary tumor. A patient with multiple primaries may have a different "Year First Seen for This Primary" on each case. Only years *after* your registry's reference date should be entered. Include all four digits.

Examples: A patient had surgery for rectal carcinoma at another institution in December 1999, and started radiation at your facility in January 2000. Assign **2000** as the "Year First Seen for This Primary" at your facility.

Your registry's reference date is January 1, 1998. A patient was diagnosed at your facility in 1997, and you are now providing treatment for recurrence of this disease in 2001. Assign the treatment year **2001** as "Year First Seen for This Primary" because the patient was first seen *before* your reference date.

If a patient had a previous cancer case, the "Year First Seen for This Primary" may differ from the first two digits of the "Accession Number".

Example: The patient had a breast primary in 2001 and was assigned "Accession Number" 200100150, and the "Year First Seen for This Primary" was recorded as **2001**. The patient developed a second primary (kidney) in 2002. Designate **2002** as the "Year First Seen" for the kidney primary, but keep the same "Accession Number".

Patients seen at the end of a calendar year may present unusual problems. A patient may have inconclusive scans or tests in December and be diagnosed in January. Use the year of diagnosis as the "Year First Seen for This Primary" in such instances.

Example: A patient is admitted to the reporting facility in December 1999 and is diagnosed with cancer in January 2000. Assign **2000** as the "Year First Seen for This Primary".

Primary Payer at Diagnosis | NAACCR Version 9.1 field "Primary Payer at Dx", Item 630, columns 329-330

This field reflects the primary payer *at the time of diagnosis*. Do not update this if the payer changes later. If more than one category applies around the time of diagnosis, code whichever payer provided the *largest* amount. The diagnosing institution usually has the most reliable information to code this field. If your facility is seeing the patient quite some time after diagnosis and you are not certain of the payer *at* diagnosis, use the **88** code (or **00** if you suspect that the patient had no insurance when diagnosed, or **99** if you aren't even sure if s/he was insured then at all).

The codes are as follows:

Primary Payer at Diagnosis	**Code**
not insured, NOS (unknown if patient self-paid or was a charity write-off)	**00**
Not insured, charity write-off/free care provided	**01**
Not insured, patient self-paid	**02**
private insurance (not covered by codes **20-47**)	**10**
managed care provider, NOS	**20**
Health Maintenance Organization (HMO)	**21**
Preferred Provider Organization (PPO)	**22**
State funded, NOS	**30**
Medicaid	**31**
Transitional Assistance (Welfare)	**32**
Federally funded, NOS	**40**
Medicare (for retired or disabled patients)	**41**
Medicare with supplement (costs not covered by Medicare were paid by another type of insurance)	**42**
CHAMPUS/TriCare (for military personnel or their dependents treated at a nonmilitary facility)	**43**
Military (for personnel/dependents treated at a military facility)	**44**
Veterans Administration	**45**
Indian Health Service	**46**
Public Health Service	**47**
insured, NOS (an unknown insurer)	**88**
unknown if insured or not (not an unknown insurer)	**99**

Medical Record Number

NAACCR Version 9.1 Item 2300, columns 1650-1660

Enter the patient's identifying Medical Record Number. If the patient has not been assigned a Medical Record Number by your facility's health information department, letter codes may be attached to some other type of identifier (for example, add "OP" to the end of some identifying number assigned by an outpatient therapy unit):

Reason a Medical Record Number Can't Be Reported	**Add on codes** (when there's no actual Medical Record Number)
Medical Record Number is unknown.	**UNK**
Outpatient treatment only	**OP**
Pathology only	**PATH**
Radiation therapy only	**RT**
One-day surgical clinic only	**SU**

The MCR uses Medical Record Number to help identify patients when communicating with the reporting facility, and to help identify multiple case reports for the same patient from a facility. The field is not edited by the MCR, so it may include any punctuation or special characters used at your facility in Medical Record Numbers or other assigned identifiers.

Abstracted By

NAACCR Version 9.1 Item 570, columns 297-299

Enter the initials of the individual who abstracted the case. Do not code the data entry person unless that person was also the abstractor. If your facility uses *numbers* in this field, these will be meaningless to the MCR; so your data system should translate these codes into alphabetic initials when a case report is exported for us.

Date of First Contact

NAACCR Version 9.1 field "Date of 1st Contact", Item 580, columns 300-307

(This field used to be called "Date of Admission or First Contact".) Enter the date the patient was first admitted to or seen at your facility (in MMDDCCYY format) for the diagnosis and/or treatment of this case. Use the following rules:

inpatient: first date of admission as an inpatient for the neoplasm being reported, or the date when diagnosis of a reportable neoplasm was made during a long-term hospitalization for another condition

outpatient: date the patient was first diagnosed, treated, or seen as an outpatient for the neoplasm being reported (for example, for an outpatient biopsy, x-ray, scan or laboratory test)

autopsy: date of death for a case diagnosed at autopsy (not necessarily the autopsy date)

Managing Physician Name

stored in NAACCR Version 9.1 field "State/Requestor Items", Item 2220, columns 1026-1076

This is not a standard field in the NAACCR case record layout. When you enter a code number into the standard field "Physician--Managing" (Item 2460, columns 1847-1854), your data system should translate this code into a full alphabetic name for us, and store that name in columns 1026-1076 of the record layout. The name need not be in any particular format, but we hope that your system produces as *complete* a name as possible (for example, "Smith John James" rather than just "J. Smith" in case there is more than one physician with this name at your facility). Titles such as "M.D.", "D.D.S.", etc. do not have to be included.

Determine the physician most responsible for the patient's cancer care. It is this physician who may be contacted regarding enrollment of the patient in a special study or about permission for a researcher to contact the patient or patient's family. Although several physicians may be involved in the care of a patient, one tends to manage the patient's cancer care. If there is question as to which physician to record, choose the discharging physician.

Patient Name

A standardized format for recording patient name is essential for matching and linking all of a patient's case records. If three facilities send in the same patient name expressed in different ways (for example, Jane Doe Buck, Jane Doe-Buck and Jane D. Buck), it becomes more difficult for us to recognize that these three records are for the same patient. When matching patient names from our data system to mortality data or any other electronic data files, differences in name formatting are also problematic.

Last Name — NAACCR Version 9.1 field "Name--Last", Item 2230, columns 1526-1550

Enter the patient's surname, preferably without punctuation or spaces. For people with more than one surname separated by a space or a hyphen, enter the compound name in this single field. For example, "Doe-Buck" or "Doe Buck" is entered as **Doebuck**; "O'Neill" is entered as **Oneill**. If a last name begins with the word "Saint", abbreviate "Saint" and connect it to the rest of the name (for example, "Saint John" is entered as **Stjohn**). Do not enter titles and designations such as Mr., Mrs., Dr., Rev., Br., Sr., Jr., III, etc. in this field. (See the field "Name Suffix".) The "Last Name" field may not be empty.

If punctuation (hyphen, apostrophe, period) or embedded spaces are included in this field, we prefer that your data system filter/remove them when an MCR data file is prepared. If punctuation/spaces are sent in, our data system will remove them upon upload, but your original data may not pass our pre-upload ("scan") edits.

Name Suffix — NAACCR Version 9.1 field "Name--Suffix", Item 2270, columns 1582-1584

"Name Suffix" is an identifier following a person's last name -- usually a generation identifier (such as Senior, Junior, III) -- which helps distinguish patients with the same name. Do not use punctuation. If multiple suffixes are used, the generation-specific suffix (Junior, Third, etc.) is to be recorded (rather than an occupation-related suffix).

Identifier	Abbreviation
Junior	**Jr**
Senior	**Sr**
the Third	**III**
the Fourth	**IV**

Leave the field empty if the patient does not have a "Name Suffix", or if it is unknown.

First Name

NAACCR Version 9.1 field "Name--First", Item 2240, columns 1551-1564

Enter the patient's first name. For patients with a compound first name (e.g., Mary Jane), include the space separating the parts of the name (**Mary_Jane**). For a patient who usually uses only the first letter of his/her first name and is known by the middle name (e.g., C. Douglas Jones), enter the first initial and the middle name, separated by a space, into the "First Name" field (**C_Douglas**); then leave the "Middle Name" field blank.

For patients with religious or other titles (e.g., Sister Mary White or Doctor Mary White), enter only the patient's first name (**Mary**) in the first name field; do not enter the patient's title here. (The MCR obtains information on religious and other occupational titles in the occupation/industry fields.)

For patient name matching and other functions of our data system, this field cannot be empty for the MCR. We may have to contact you for clarification whenever a "First Name" comes in empty.

Middle Name

NAACCR Version 9.1 field "Name--Middle", Item 2250, columns 1565-1578

Enter the patient's entire middle name whenever possible. If only the middle initial is known, enter just this. Leave empty if there is no middle name/initial, or if it is unknown. This field may contain embedded spaces.

Maiden Name

NAACCR Version 9.1 field "Name--Maiden", Item 2390, columns 1770-1784

Enter the maiden name of a female patient, preferably without punctuation or embedded spaces. Leave the field empty if maiden name is not applicable or not known (i.e., leave the field empty for males and for any female whose maiden name is identical to her surname). Do not enter an alias or “aka” name here (see next field description).

If you enter punctuation or spaces in this field, we prefer your data system to filter/remove them when an MCR data file is prepared. If punctuation/spaces are sent in, our data system will remove them upon upload, but your original data may not pass our pre-upload ("scan") edits.

Alias

NAACCR Version 9.1 field "Name--Alias", Item 2280, columns 1585-1599

Patients may sometimes use different names or nicknames, or may have had different names at different times in their lives. These "also known as" or "aka" names are categorized as aliases. This item is needed to match multiple case reports for a patient having records under different names.

If the patient uses an alias for a first name only, record the actual last name, followed by a blank space and the first name alias.

Example: Ralph Williams also uses the name Bud Williams. Record **Williams_Bud** in the "Alias" field.

If the patient uses only a last name alias, record the last name alias, followed by a blank space and the actual first name.

Example: Janice Smith also uses the name Janice Brown. Record **Brown_Janice**.

If the patient uses an alias for both first and last names, record the last name alias followed by a blank space and the first name alias.

Example: Joe Jones also uses the name Sam Smith. Record **Smith_Sam** in the "Alias" field.

If the field is too short (at 15 characters) to contain the entire "aka" name, fill in as much as you can. Leave the field empty if the patient does not have an alias, or if the alias is unknown.

Birth Date

NAACCR Version 9.1 Item 240, columns 82-89

Enter the patient's date of birth in MMDDCCYY format. If the month or day has only one digit, enter a zero before the number. Enter all four digits of the birth year.

Estimate the year of birth when exact information is unavailable, and indicate in the "Comments/Narrative Remarks" field that the date entered is only an estimate. (It is preferable to estimate than to code the year as unknown.) ONLY enter **9999** if there is no basis for estimating a birth year.

Example: The patient is 70 years old when diagnosed on June 15, 1993. The medical record has no exact birth date. Record unknown month (**99**) and day (**99**), and estimate the year as 1923. The complete birth date entered would be **99991923**; and the "Comments" field should include the important fact that the birth year was estimated.

Month	Code
January	**01**
February	**02**
March	**03**
April	**04**
May	**05**
June	**06**
July	**07**
August	**08**
September	**09**
October	**10**
November	**11**
December	**12**
unknown	**99**

Day	Code
first	**01**
second	**02**
third	**03**
...	**..**
...	**..**
...	**..**
thirty-first	**31**
unknown	**99**

Year	Code
1890	**1890**
1990	**1990**
unknown*	**9999**

*Try to estimate year rather than use unknown!

Age at Diagnosis

NAACCR Version 9.1 Item 230, columns 79-81

Enter the patient's age at the time of initial diagnosis. Age is measured in completed years of life (age at the last birthday before diagnosis).

Note that the patient's age at admission may not be the patient's age on the date of diagnosis. To calculate "Age at Diagnosis", subtract the year of the patient's birth from the year of diagnosis; if the patient's birthday is after the date of diagnosis, subtract one year from that calculated age.

Example: A patient develops cancer in March 2002. The patient's date of birth is December 1932. Subtract 1932 from 2002 to get a calculated age of 70. Since the patient has not yet had a birthday this year (2002), subtract one year from the calculated age. The patient was therefore 69 at diagnosis. Enter **069**.

Number of years of age at last birthday	Code
less than 1 year old	**000**
1 year old, but less than 2	**001**
2 years old, but less than 3	**002**
…	**…**
98 years old, but less than 99	**098**
…	**…**
one hundred twenty years old	**120**
unknown	**999**

The patient's age helps to validate the Birth Date, and it is the basis for grouping patients into age categories for statistical purposes. If your computer system automatically calculates age for you, please check that the "Age at Diagnosis" field makes sense for the case. It is easy to mis-enter a digit in the Birth Date (or enter the diagnosis year instead of the birth year) and produce a non-sensical "Age at Diagnosis" (e.g., an infant who is divorced, a retired teacher, smokes, and has prostate cancer).

If a patient's age is unusual for his or her diagnosis (like a young man with prostate cancer), please note that you have verified this unusual combination in the **Comments/Narrative Remarks** field.

Birthplace

NAACCR Version 9.1 Item 250, columns 90-92

Enter the code for the patient's Birthplace (see Appendix A). Continents, foreign countries and U.S. regions and states are included in these codes. Codes for Massachusetts and nearby states are shown here for convenience:

State	Code	State	Code
Massachusetts	**005**	New York	**011**
Connecticut	**007**	Pennsylvania	**014**
Maine	**002**	Rhode Island	**006**
New Hampshire	**003**	Vermont	**004**
New Jersey	**008**		

Enter **000** for Birthplace in the U.S., exact state or region unknown.

Enter **998** for Birthplace outside the U.S. if the country or continent is unknown.

Enter **999** only for a completely unknown Birthplace.

We appreciate that it can be difficult to code this field, but Birthplace is important to some areas of public health research. Use your best judgment to code this field, and don't be afraid to make an "educated guess" if the medical record lacks specifics. Avoid using code **999** -- see if there is anything to at least indicate a probable foreign birth (**998**) or probable U.S. birth **000**).

Be as specific as possible in coding Birthplace, but please note that you don't always need very exact information to avoid using an "unknown" code. Appendix A includes codes for many non-specific regions that would be preferable to a complete unknown. A few examples of "NOS" codes that could be used when you have only partial information follow:

NOS Region examples	Code	NOS Region examples	Code
Southeastern U.S.	**030**	Scandinavia, NOS	**420**
Northern Midwest U.S.	**050**	Eastern Europe, NOS	**499**
Caribbean, NOS	**245**	Africa, NOS	**500**
Central America, NOS	**250**	Asia, NOS	**600**
Latin America, NOS	**265**	East Asia, NOS	**680**

Social Security Number

NAACCR Version 9.1 Item 2320, columns 1663-1671

Enter the patient's Social Security Number without dashes. This is vital for proper patient identification. It is used primarily to identify multiple reports for patients whose names have changed or been reported differently by different facilities (different spellings, for example).

Enter nine numerals. This number may be used as a Medicare claim number; however, a patient's Medicare claim number may not be that patient's Social Security Number (but rather, that of the spouse). Please try to ascertain the patient's own Social Security Number.

Do not enter a Social Security Number that begins or ends with "B" or "D". These letters identify a spouse's Social Security Number (the letter indicates that the patient receives benefits under the spouse's number). Enter **999999999** for these patients. Do *not* knowingly enter a spouse's (or someone else's) Social Security Number when you can find no Social Security Number for the patient -- use **999999999** instead.

If the patient has no Social Security Number or if it is unknown, enter **999999999**. The field should not be empty, and it should not be filled with zeroes.

Address at Diagnosis

Address at diagnosis is used in determining cancer rates within geographic areas (for example, the MCR publishes case counts by town of residence at diagnosis). Therefore it is very important that the patient's own residence address at the time of diagnosis be reported. This may not be the patient's current or mailing address.

Becoming ill often changes a patient's living situation abruptly right around the time of diagnosis, especially for the elderly. Every effort should be made to determine the patient's address at diagnosis.

If a patient has multiple primaries over time, the address at diagnosis may be different for subsequent tumors. Do not update the "Address at Diagnosis" fields for a given primary if the patient moves later.

The MCR has adapted the rules for determining residency of the U.S. Bureau of the Census. It is important to follow the rules exactly so that MCR data can be compared with data from other sources, and so that Census population data can be applied to our cancer data correctly. The following rules apply to entering the address.

- Enter the address of the patient's usual residence on the Date of Diagnosis. "**Usual residence**" is where the patient lives and sleeps most of the time, and is not necessarily the legal or voting residence. Do not record an address where the patient may be staying temporarily, such as a friend's or relative's local address. If both a street address and a P.O. Box (or other mailing address) are given, enter the street address.
- If the patient has more than one home (e.g., lives on Cape Cod in summer and in Florida during winter), enter the residence where the patient lives most of the time. If that cannot be determined, or if they spend six months in each place, enter whichever address was given to your facility by the patient and please note in the "Comments/Narrative Remarks" field whatever you know about the patient's non-Massachusetts residence.
- For military personnel and their families living on a military base, enter the specific street address on the base. For military personnel living off-base, enter that off-base address.
- For institutionalized patients, including those incarcerated or in long-term care facilities, their address is that of the institution. The institution's street address (rather than just its name) is preferred.
- Use the at-diagnosis address for college students (where he/she lives most of the year -- probably at or near the college). For children in boarding schools below college level, enter the parents' address. Children in joint custody situations should be assigned the address where they live most of the time; if living time is divided equally between two parental addresses, record the first address reported to your facility.
- For Class 3 or 4 cases, the patient's usual residence may have changed since diagnosis. The address *at diagnosis* is preferred. If that is unknown, enter the patient's address on admission to your facility, or a current address; please note in the "Comments/Narrative Remarks" field if the "Address at Diagnosis" reported is actually a *current* address.
- If the patient is homeless or transient with no usual residence, use the address where he/she was staying when diagnosed (e.g., a shelter or the diagnosing institution). Please note in the "Comments/Narrative Remarks" field that the patient was homeless.
- For live-in professional caregivers (such as nannies, *au pair*s, nurses, etc.), report the address where they live and sleep most of the time.

Street Address at Diagnosis

NAACCR Version 9.1 field "Addr at Dx--No & Street", Item 2330, columns 1672-1696

Enter the building number and street of the patient's usual permanent residence at the time of diagnosis. Only use numbers, letters and the number symbol(#), slash(/), hyphen(-) or period(.) in this field. Include foreign street addresses. Be as specific as possible.

Building numbers should precede street names. Unit designations should be placed directly after the building number (e.g., **123E Main St**) or after the street name (e.g., **123 Main St Apt E**). If the building number contains "½" (e.g., 38½ Main Street), enter this using the format **38_1/2_Main St**. Whenever possible, avoid entering just a building's name (e.g., Nice View Apartments or Smith Rest Home) without its street address.

25 characters are allotted to this field. Use abbreviations as needed (see below for common standard abbreviations used in addresses, and Appendix F for a complete list.). If you run out of space, omit the less important elements of a street address, such as an apartment number. Do not omit those elements needed to locate the address in a census tract, such as building number, full street name, and street type. If there is not enough room to include the *entire* apartment/unit number, then omit the entire apartment/unit number rather than truncate it (for example, if apartment "#1234" would have to be truncated at "#12" in order to fit into the field, please leave the apartment number out rather than have it appear that the patient lives in apartment #12; units within a building may have different environmental exposures).

Do not update this field for a given primary if the patient's address changes after diagnosis.

Some standard postal abbreviations:

Avenue	**Ave**	Heights	**Hts**	Road	**Rd**
Boulevard	**Blvd**	Highway	**Hwy**	Route	**Rte**
Building	**Bldg**	Lane	**Ln**	Square	**Sq**
Circle	**Cir**	Manor	**Mnr**	Street	**St**
Court	**Ct**	Mountain	**Mtn**	Terrace	**Ter**
Crescent	**Cres**	Parkway	**Pkwy**	Trail	**Trl**
Drive	**Dr**	Place	**Pl**	Turnpike	**Tpke**
Extension	**Ext**	Plaza	**Plz**	Village	**Vlg**
Gardens	**Gdns**	Point	**Pt**		

If the street address cannot be determined, enter "**Unknown**". Do not leave this field empty, or we will have to assume that it was left incomplete accidentally.

City / Town at Diagnosis

NAACCR Version 9.1 field "Addr at Dx--City", Item 70, columns 22-41

Enter the name of the city/town of residence. For patients using mailing addresses (such as P.O. boxes), try to determine the usual street address and town of residence. This may not be the mailing address' town or post office name. Use standard abbreviations. Include spaces for city/town names consisting of more than one word (**New_Bedford**).

If a patient's usual residence is in a foreign country, enter the name of the foreign city/town. Space permitting, you may also enter the country's name here (the MCR does not collect the country's name or code in a separate field), or give us the foreign country name in the "Comments/Narrative Remarks" field.

Do not update this field for a given primary if the patient's address changes after diagnosis. If the city/town where the patient lived at the time of diagnosis cannot be determined, enter "**Unknown**". Do not leave this field empty.

State at Diagnosis

NAACCR Version 9.1 field "Addr at Dx--State", Item 80, columns 42-43

Enter the standard two-letter U.S. Postal Service abbreviation for the state/province of residence at diagnosis (see **Table III** on the next page). If the patient has multiple primaries, each address may be different for subsequent tumors. Do not update this field for a given primary if the patient's address changes after diagnosis.

If the patient lived inside the U.S. (including its territories, commonwealths/possessions listed in **Table III**) or Canada at diagnosis, but the specific *state/province* is *unknown*, enter **XX**.

If the patient lived outside the U.S. (including its territories, commonwealths/possessions in **Table III**) and outside Canada at diagnosis and the *country* of residence is *known*, enter **XX**.

If the patient lived outside the U.S. (including its territories, commonwealths/possessions in **Table III**) and outside Canada at diagnosis and the *country* is *un*known, enter **YY**.

Only if the country is *completely* unknown (i.e., you cannot even determine if the address is in the U.S./Canada or not), enter **ZZ**.

For foreign (non-U.S./Canadian) residents, the MCR does *not* collect country name/code in its own field. You may include the country name in the "City / Town" field if it will fit, or give it to us in the "Comments/Narrative Remarks" field.

Table III

Common Codes for the State Field

United States:

State	Code	State	Code	State	Code
Alabama	**AL**	Kentucky	**KY**	North Dakota	**ND**
Alaska	**AK**	Louisiana	**LA**	Ohio	**OH**
Arizona	**AZ**	Maine	**ME**	Oklahoma	**OK**
Arkansas	**AR**	Maryland	**MD**	Oregon	**OR**
California	**CA**	Massachusetts	**MA**	Pennsylvania	**PA**
Colorado	**CO**	Michigan	**MI**	Rhode Island	**RI**
Connecticut	**CT**	Minnesota	**MN**	South Carolina	**SC**
Delaware	**DE**	Mississippi	**MS**	South Dakota	**SD**
District of Columbia	**DC**	Missouri	**MO**	Tennessee	**TN**
Florida	**FL**	Montana	**MT**	Texas	**TX**
Georgia	**GA**	Nebraska	**NE**	Utah	**UT**
Hawaii	**HI**	Nevada	**NV**	Vermont	**VT**
Idaho	**ID**	New Hampshire	**NH**	Virginia	**VA**
Illinois	**IL**	New Jersey	**NJ**	Washington	**WA**
Indiana	**IN**	New Mexico	**NM**	West Virginia	**WV**
Iowa	**IA**	New York	**NY**	Wisconsin	**WI**
Kansas	**KS**	North Carolina	**NC**	Wyoming	**WY**

Canada:

Province	Code
Alberta	**AB**
British Columbia	**BC**
Manitoba	**MB**
New Brunswick	**NB**
Newfoundland	**NF**
Northwest Territories	**NT**
Nova Scotia	**NS**
Nunavut	**NU**
Ontario	**ON**
Prince Edward Island	**PE**
Quebec	**QC**
Saskatchewan	**SK**
Yukon Territory	**YT**

U.S. Territories/Commonwealths/Possessions:

Locality	Code
American Samoa	**AS**
Federated States of Micronesia	**FM**
Guam	**GU**
Marshall Islands	**MH**
Northern Mariana Islands	**MP**
Palau (Belau)	**PW**
Puerto Rico	**PR**
Trust Territories	**TT**
Virgin Islands	**VI**

Other codes:

U.S., NOS	**XX**
Canada, NOS	**XX**
Not U.S./Canada, country known	**XX**
Not U.S./Canada, country unknown	**YY**
Complete unknown	**ZZ**

ZIP / Postal Code at Diagnosis

NAACCR Version 9.1 field "Addr at Dx--Postal Code", Item 100, columns 47-55

Enter the patient's 5-digit ZIP Code (or nine-digit "ZIP+4" Code) corresponding to the street address at diagnosis. Do not enter a hyphen to separate the first five from the last four digits. For Canadian residents, enter their 6-character alphanumeric Postal Code. Do not update this field for a given primary if the patient's address changes after diagnosis.

For foreign (non-U.S./Canadian) residents, enter their foreign Postal Code, if available.

Enter **888888888** for foreign (non-U.S./Canadian) residents if their foreign Postal Code is unknown.

Enter **999999999** for U.S./Canadian residents if the patient's ZIP/Postal Code is unknown.

Enter **999999999** if the country of residence is completely unknown (i.e., you cannot even determine if the patient lives inside or outside the U.S./Canada).

Sex

NAACCR Version 9.1 Item 220, column 78

Enter the appropriate code for the patient's sex/gender:

Sex	Code
male	**1**
female	**2**
other (including hermaphrodite and persons with sex chromosome abnormalities)	**3**
transsexual (persons who have undergone sex-change surgery)	**4**
not stated	**9***

* Please avoid this code! Rates cannot be calculated for unknown gender because population data cannot be assigned.

If the patient's gender is very unusual for his or her first name (a boy named "Sue", for example) but you have verified that both are correct, please put a note in the "Comments/Narrative Remarks" field. The MCR does quality control checks on unusual first name/gender code combinations.

Marital Status at Diagnosis

NAACCR Version 9.1 field "Marital Status at Dx", Item 150, column 70

Enter the patient's marital status at the time of initial diagnosis for each primary (case). This field is often important when a patient's residential (address) history is being researched because a change in marital status often results in a change of address.

If the patient is under 15 years of age, assume he/she has never married and enter code **1**. Do not update this field for a given primary if the patient's Marital Status changes after diagnosis. Marital Status may be coded differently for different primaries for a patient, but note that code **1** is *only* meant to be used when the patient has *never* been married. The field should not be left empty.

Marital Status at Diagnosis	**Code**
single (has *never* been married)	**1**
married (including common law)	**2**
separated	**3**
divorced	**4**
widowed	**5**
unknown	**9**

Patient Race(s)

Race data are important in public health research. If information regarding a patient's race is not recorded on the face sheet of the medical record, every attempt should be made to find it in the history and physical examination or other parts of the medical record.

Patient race coding has become more complicated! Up to five different races may be coded for each patient in accordance with U.S. Census Bureau procedures. [In the 2000 Decennial Census, about 150,000 Massachusetts residents (~2.3 % of the population) described themselves as multiracial; these tended to be young people, however, so the percentage of *cancer patients* who are multiracial may be much smaller at this time.]

For patients diagnosed in 2001 and later, all five race fields must contain a valid code and none may be left empty; for cases diagnosed before 2001, if the patient has no case diagnosed in 2001 or later, you may leave fields Race 2, Race 3, Race 4 and Race 5 empty. If a patient with a 2001 (or later) diagnosis also had a diagnosis from an earlier year, you should make sure that the complete race information is coded for both cases.

When coding race, it is important to remember that race is defined by specific physical heredity -- *not* by birthplace, place of residence, or cultural characteristics. The only exception to this rule involves the use of "Asian, NOS" and a race assumption based on an Asian birthplace -- see footnote #2 on each table of race codes that follows for details.

For patients described by a **single race**, code this in the "Race 1" field, and fill "Race 2", "Race 3", "Race 4" and "Race 5" with code **88** (meaning "no further races are recorded").

For **multiracial** patients, fill in the "Race 1", "Race 2", etc. fields with the appropriate codes (using the rules on the next page) that describe the patient's races, and fill the remaining race fields with **88** when no further races are documented.

Unfortunately, there are not clear guidelines at this time for determining *which* race should be considered "Race 1" for multiracial patients beyond the rules below. If the medical record has conflicting information (e.g., a patient described in one place as "Black and Korean" and in another as "Korean and Black"), use your best judgment to determine how to assign the codes. It is important to understand that "Race 1" will *not always* reflect a multiracial patient's "main" race -- for example, someone with one Black grandparent and three White grandparents is assigned "Race 1"=Black and "Race 2"=White in accordance with the rules below. "Race 1" should indicate the "primary" race of a multiracial patient, or the race that the patient identified first, with the following provisions:

- If a patient's race is recorded as a combination of White and any other race(s), code the *other* race(s) before White.

  Example: Patient is recorded "White and Native American". Code Race 1 as **03** for American Indian, Race 2 as **01** for White, and Races 3/4/5 as **88**.

- If a patient is a combination of Hawaiian and any other race(s), code Hawaiian first.

  Example: Patient is recorded "Japanese and Native Hawaiian". Code Race 1 as **07** for Native Hawaiian, Race 2 as **05** for Japanese, and Races 3/4/5 as **88**.

- Otherwise, code "Race 1" as the first recorded non-White race.

- Code **96** is used for two different categories of Asians. **96** may indicate unspecified "Asian, NOS" *or* it may indicate some *specific* Asian race that is not covered by the main Asian codes. Do *not* use **96** for "Asian, NOS" in a subsequent field if a specific Asian race(s) has already been coded.

  Example: Patient is "Vietnamese and some other Asian race". Code Race 1 as **10** for Vietnamese and Races 2/3/4/5 **88**. Do *not* enter **96** for the additional Asian multiracial information; the patient is coded as if *completely* Vietnamese.

- **99** can only be used when all five race fields are filled with it. A multiracial person cannot be coded, for example, as "Chinese and some unknown race". If a multiracial heredity is only partially known, it is probably best to code just the known information.

If a patient's race is unknown, s/he may be multiracial. All five fields must be **99** to indicate unknown race**s**.

Code **88** for "no further race(s) documented" is not valid for the "Race 1" field.

Among the five fields, *except for codes **88** and **99***, a race code may be used only once.

Example: If a patient (often a child) is described as "Black/White and Black/Asian" (i.e., the patient's parents are both multiracial), do not code Black twice. Race 1 is **02** for Black, Race 2 is **96** for Asian, Race 3 is **01** for White, and Races 4/5 are **88**.

Race 1

NAACCR Version 9.1 Item 160, columns 71-72

Use the following codes to enter the patient's single race, or the first of multiple races:

Race 1	Code	Race 1	Code
White[1]	**01**	Micronesian, NOS	**20**
Black; African American; Negro	**02**	Chamorran	**21**
American Indian; Aleutian; Eskimo; Native North American	**03**	Guamanian, NOS	**22**
		Polynesian, NOS	**25**
Chinese	**04**	Tahitian	**26**
Japanese	**05**	Samoan	**27**
Filipino	**06**	Tongan	**28**
Hawaiian (Native)	**07**	Melanesian, NOS	**30**
Korean	**08**	Fiji Islander	**31**
Asian Indian; Bangladeshi; Bhutanese; Nepalese; Pakistani; Sikkimese; Sri Lankan	**09**	New Guinean	**32**
		other Asian race (including Indonesian, Burmese/Myanmaran); Asian, NOS; Oriental, NOS[2]	**96**
Vietnamese	**10**		
Laotian	**11**		
Hmong	**12**	Pacific Islander, NOS	**97**
Kampuchean; Cambodian; Khmer	**13**	some other known race[3]	**98**
Thai	**14**	unknown[4]	**99**

[1] If the medical record does not specify race, and the patient is described as Mexican, Puerto Rican or Cuban, assume that the patient is White.

[2] When a patient's race is recorded only as "Asian" or "Oriental" and the Birthplace is a specific Asian nation synonymous with one of the specific Asian race codes above, use the specific race code. For example, if the patient is described just as "Asian" and was born in Japan, enter code **05** for Japanese rather than **96**.

[3] This race can't be assigned to one of the codes **01** - **97**.

[4] All five race fields must be **99** if the patient's race is unknown. Code partial race information if possible.

Race 2

NAACCR Version 9.1 Item 161, columns 204-205

Use the following codes to enter the patient's second race (enter **88** if the patient is not multiracial):

Race 2	Code	Race 2	Code
White[1]	**01**	Chamorran	**21**
Black; African American; Negro	**02**	Guamanian, NOS	**22**
American Indian; Aleutian; Eskimo; Native North American	**03**	Polynesian, NOS	**25**
		Tahitian	**26**
Chinese	**04**	Samoan	**27**
Japanese	**05**	Tongan	**28**
Filipino	**06**	Melanesian, NOS	**30**
Hawaiian (Native)	**07**	Fiji Islander	**31**
Korean	**08**	New Guinean	**32**
Asian Indian; Bangladeshi; Bhutanese; Nepalese; Pakistani; Sikkimese; Sri Lankan	**09**	no further race(s) documented	**88**
		other Asian race (including Indonesian, Burmese/Myanmaran); Asian, NOS; Oriental, NOS[2]	**96**
Vietnamese	**10**		
Laotian	**11**		
Hmong	**12**	Pacific Islander, NOS	**97**
Kampuchean; Cambodian; Khmer	**13**	some other known race[3]	**98**
Thai	**14**	unknown[4]	**99**
Micronesian, NOS	**20**		

[1] If the medical record does not specify race, and the patient is described as Mexican, Puerto Rican or Cuban, assume that the patient is White.

[2] When a patient's race is recorded only as "Asian" or "Oriental" and the Birthplace is a specific Asian nation synonymous with one of the specific Asian race codes above, use the specific race code. For example, if the patient is described just as "Black and Asian" and was born in Japan, enter code **05** for Race 2 rather than **96**.

[3] This race can't be assigned to one of the codes **01 - 97**.

[4] All five race fields must be **99** if the patient's race is unknown. Code partial race information if possible.

Race 3

NAACCR Version 9.1 Item 162, columns 206-207

Use the following codes to enter the patient's third race (enter **88** if the patient is not multiracial, or if the patient has only two races):

Race 3	Code	Race 3	Code
White[1]	**01**	Chamorran	**21**
Black; African American; Negro	**02**	Guamanian, NOS	**22**
American Indian; Aleutian; Eskimo; Native North American	**03**	Polynesian, NOS	**25**
		Tahitian	**26**
Chinese	**04**	Samoan	**27**
Japanese	**05**	Tongan	**28**
Filipino	**06**	Melanesian, NOS	**30**
Hawaiian (Native)	**07**	Fiji Islander	**31**
Korean	**08**	New Guinean	**32**
Asian Indian; Bangladeshi; Bhutanese; Nepalese; Pakistani; Sikkimese; Sri Lankan	**09**	no further race(s) documented	**88**
		other Asian race (including Indonesian, Burmese/Myanmaran); Asian, NOS; Oriental, NOS[2]	**96**
Vietnamese	**10**		
Laotian	**11**		
Hmong	**12**	Pacific Islander, NOS	**97**
Kampuchean; Cambodian; Khmer	**13**	some other known race[3]	**98**
Thai	**14**	unknown[4]	**99**
Micronesian, NOS	**20**		

[1] If the medical record does not specify race, and the patient is described as Mexican, Puerto Rican or Cuban, assume that the patient is White.

[2] When a patient's race is recorded only as "Asian" or "Oriental" and the Birthplace is a specific Asian nation synonymous with one of the specific Asian race codes above, use the specific race code. For example, if the patient's third race is described just as "Asian" and he/she was born in Japan, enter code **05** for Japanese rather than **96**.

[3] This race can't be assigned to one of the codes **01 - 97**.

[4] All five race fields must be **99** if the patient's race is unknown. Code partial race information if possible.

Race 4

NAACCR Version 9.1 Item 163, columns 208-209

Use the following codes to enter the patient's fourth race (enter **88** if the patient is not multiracial, or if the patient has only three races):

Race 4	Code	Race 4	Code
White[1]	**01**	Chamorran	**21**
Black; African American; Negro	**02**	Guamanian, NOS	**22**
American Indian; Aleutian; Eskimo; Native North American	**03**	Polynesian, NOS	**25**
		Tahitian	**26**
Chinese	**04**	Samoan	**27**
Japanese	**05**	Tongan	**28**
Filipino	**06**	Melanesian, NOS	**30**
Hawaiian (Native)	**07**	Fiji Islander	**31**
Korean	**08**	New Guinean	**32**
Asian Indian; Bangladeshi; Bhutanese; Nepalese; Pakistani; Sikkimese; Sri Lankan	**09**	no further race(s) documented	**88**
		other Asian race (including Indonesian, Burmese/Myanmaran); Asian, NOS; Oriental, NOS[2]	**96**
Vietnamese	**10**		
Laotian	**11**		
Hmong	**12**	Pacific Islander, NOS	**97**
Kampuchean; Cambodian; Khmer	**13**	some other known race[3]	**98**
Thai	**14**	unknown[4]	**99**
Micronesian, NOS	**20**		

[1] If the medical record does not specify race, and the patient is described as Mexican, Puerto Rican or Cuban, assume that the patient is White.

[2] When a patient's race is recorded only as "Asian" or "Oriental" and the Birthplace is a specific Asian nation synonymous with one of the specific Asian race codes above, use the specific race code. For example, if the patient's fourth race is described just as "Asian" and he/she was born in Japan, enter code **05** for Japanese rather than **96**.

[3] This race can't be assigned to one of the codes **01 - 97**.

[4] All five race fields must be **99** if the patient's race is unknown. Code partial race information if possible.

Race 5

NAACCR Version 9.1 Item 164, columns 210-211

Use the following codes to enter the patient's fifth race (enter **88** if the patient is not multiracial, or if the patient has only four races):

Race 5	Code	Race 5	Code
White[1]	**01**	Chamorran	**21**
Black; African American; Negro	**02**	Guamanian, NOS	**22**
American Indian; Aleutian; Eskimo; Native North American	**03**	Polynesian, NOS	**25**
		Tahitian	**26**
Chinese	**04**	Samoan	**27**
Japanese	**05**	Tongan	**28**
Filipino	**06**	Melanesian, NOS	**30**
Hawaiian (Native)	**07**	Fiji Islander	**31**
Korean	**08**	New Guinean	**32**
Asian Indian; Bangladeshi; Bhutanese; Nepalese; Pakistani; Sikkimese; Sri Lankan	**09**	no further race(s) documented	**88**
		other Asian race (including Indonesian, Burmese/Myanmaran); Asian, NOS; Oriental, NOS[2]	**96**
Vietnamese	**10**		
Laotian	**11**		
Hmong	**12**	Pacific Islander, NOS	**97**
Kampuchean; Cambodian; Khmer	**13**	some other known race[3]	**98**
Thai	**14**	unknown[4]	**99**
Micronesian, NOS	**20**		

[1] If the medical record does not specify race, and the patient is described as Mexican, Puerto Rican or Cuban, assume that the patient is White.

[2] When a patient's race is recorded only as "Asian" or "Oriental" and the Birthplace is a specific Asian nation synonymous with one of the specific Asian race codes above, use the specific race code. For example, if the patient's fifth race is described just as "Asian" and he/she was born in Japan, enter code **05** for Japanese rather than **96**.

[3] This race can't be assigned to one of the codes **01 - 97**.

[4] All five race fields must be **99** if the patient's race is unknown. Code partial race information if possible.

Spanish/Hispanic Origin

NAACCR Version 9.1 Item 190, column 75

In the absence of specific information in the medical record, this field is used to reflect the "best guess" as to whether or not the patient should be classified as Spanish/Hispanic for purposes of calculating cancer statistics. Information on Spanish/Hispanic Origin may be found in the medical record. *All information sources* should be used to determine the best code, including stated ethnicity, Birthplace, personal history and language spoken, and surname/maiden name. Persons with Spanish surname/origin may be of *any* race(s); therefore, coding should always be independent of race. Spanish/Hispanic origin is not synonymous with birth in a Spanish-language country. Use Birthplace as a guide in determining the correct code, but do not rely on it exclusively.

The following codes are used for this field:

Origin	Code
non-Spanish; non-Hispanic (including Brazilians and Portuguese)	**0**
Mexican; Chicano	**1**
Puerto Rican	**2**
Cuban	**3**
Central American or South American *except* Brazilian*	**4**
other specific Spanish/Hispanic origin (including Spanish Europeans)	**5**
Spanish/Hispanic/Latino, NOS (There is evidence other than surname/maiden name that the person is Hispanic, but he/she cannot be assigned to any of the categories **1**-**5**.)	**6**
Spanish surname only** (The only evidence of person's Hispanic origin is surname/maiden name, and there is no contrary evidence that the patient is not Hispanic.)	**7**
unknown whether Spanish/Hispanic or not***	**9**

* Code Brazilians and Portuguese as non-Hispanic (**0**).

** See next page for details.

*** Use this code sparingly! If the medical record indicates nothing about Hispanic origin, and the surname/maiden name is not typically Hispanic, do not be afraid to code the person as non-Hispanic if this is where your best judgment leads.

Using Spanish Surnames/Maiden Names (when all else fails) **and Code 7**

Although someone of Spanish origin may have *any* name, and someone *not* of Spanish origin may have a name that is "typically" Spanish, we would prefer a code based on name alone rather than a complete unknown. Entering **7** (for "Spanish surname *only*") does not mean that the patient is assumed Hispanic; it merely means that the person's *name* is typically Spanish.

Information recorded in the medical record about Hispanic ethnicity always takes precedence over assumptions based solely on name. If the medical record describes the patient as Mexican, Puerto Rican, Cuban or another specific origin in codes **1**-**5**, enter the appropriate code *regardless* of whether or not the patient's surname/maiden name is Hispanic.

If the patient has a Spanish surname/maiden name, but the medical record indicates that he/she is not of Spanish origin, enter **0** (for "non-Hispanic, NOS").

Lacking further information, the list on the following pages may be used to identify which names most commonly belong to those of Spanish origin. Researchers at the U.S. Census Bureau found that over 75% of individuals having each of these surnames identified themselves as being of Spanish origin in the 1990 Census. Persons with these 639 surnames combined comprise over two-thirds of the U.S. Spanish-origin population.

If the medical record contains no useful information on Spanish origin, and if the patient's surname/maiden name matches one of the names listed, and nothing in the medical record indicates that the patient is *not* Spanish/Hispanic, enter code **7** (*not* code 6). If, however, the patient's name does *not* appear on this list, DO NOT AUTOMATICALLY ASSUME that the patient is non-Hispanic; use your best judgment to determine the best code.

Exceptions: If the surname/maiden name contains the letter "**k**" or "**w**" and the medical record does not indicate that the person is Hispanic, assume s/he is non-Hispanic and enter **0**. "K" and "w" are virtually *never* in Spanish surnames.

Examples:

Name is "John Howard". Medical record indicates that he *is Hispanic*. Enter **6** for Hispanic, NOS.

Name is "John Howard". Medical record has *no* information on Hispanic ethnicity. Enter code **0** for assumed non-Hispanic based on the "w" in the surname.

Name is "John Abeyta". Medical record indicates that he is *not* Hispanic. Enter code **0** because the medical record information takes precedence over the name.

Name is "John Abeyta". Medical record has *no* information on Hispanic ethnicity. Enter **7** because the surname appears in the Census list.

PATIENT INFORMATION cont.

source: David L. Word & R. Colby Perkins, Jr., Technical Working Paper No. 13 -- "Building a Spanish Surname List for the 1990's", U.S. Bureau of the Census Population Division, March 1996.

Abeyta	Aranda	Benavidez	Carrillo	Cortez
Abrego	Arce	Benitez	Carrion	Cotto
Abreu	Archuleta	Bermudez	Carvajal	Covarrubias
Acevedo	Arellano	Bernal	Casanova	Crespo
Acosta	Arenas	Berrios	Casares	Cruz
Acuna	Arevalo	Betancourt	Casarez	Cuellar
Adame	Arguello	Blanco	Casas	Curiel
Adorno	Arias	Bonilla	Casillas	Davila
Agosto	Armas	Borrego	Castaneda	Deanda
Aguayo	Armendariz	Botello	Castellanos	Dejesus
Aguilar	Armenta	Bravo	Castillo	Delacruz
Aguilera	Armijo	Briones	Castro	Delafuente
Aguirre	Arredondo	Briseno	Cavazos	Delagarza
Alanis	Arreola	Brito	Cazares	Delao
Alaniz	Arriaga	Bueno	Ceballos	Delapaz
Alarcon	Arroyo	Burgos	Cedillo	Delarosa
Alba	Arteaga	Bustamante	Ceja	Delatorre
Alcala	Atencio	Bustos	Centeno	Deleon
Alcantar	Avalos	Caballero	Cepeda	Delgadillo
Alcaraz	Avila	Caban	Cerda	Delgado
Alejandro	Aviles	Cabrera	Cervantes	Delrio
Aleman	Ayala	Cadena	Cervantez	Delvalle
Alfaro	Baca	Caldera	Chacon	Diaz
Alicea	Badillo	Calderon	Chapa	Dominguez
Almanza	Baez	Calvillo	Chavarria	Dominquez
Almaraz	Baeza	Camacho	Chavez	Duarte
Almonte	Bahena	Camarillo	Cintron	Duenas
Alonso	Balderas	Campos	Cisneros	Duran
Alonzo	Ballesteros	Canales	Collado	Echevarria
Altamirano	Banda	Candelaria	Collazo	Elizondo
Alva	Banuelos	Cano	Colon	Enriquez
Alvarado	Barajas	Cantu	Colunga	Escalante
Alvarez	Barela	Caraballo	Concepcion	Escamilla
Amador	Barragan	Carbajal	Contreras	Escobar
Amaya	Barraza	Cardenas	Cordero	Escobedo
Anaya	Barrera	Cardona	Cordova	Esparza
Anguiano	Barreto	Carmona	Cornejo	Espinal
Angulo	Barrientos	Carranza	Corona	Espino
Aparicio	Barrios	Carrasco	Coronado	Espinosa
Apodaca	Batista	Carrasquillo	Corral	Espinoza
Aponte	Becerra	Carreon	Corrales	Esquibel
Aragon	Beltran	Carrera	Correa	Esquivel
Arana	Benavides	Carrero	Cortes	Estevez

PATIENT INFORMATION cont.

Estrada
Fajardo
Farias
Feliciano
Fernandez
Ferrer
Fierro
Figueroa
Flores
Florez
Fonseca
Franco
Frias
Fuentes
Gaitan
Galarza
Galindo
Gallardo
Gallegos
Galvan
Galvez
Gamboa
Gamez
Gaona
Garay
Garcia
Garibay
Garica
Garrido
Garza
Gastelum
Gaytan
Gil
Giron
Godinez
Godoy
Gomez
Gonzales
Gonzalez
Gracia
Granado
Granados
Griego
Grijalva
Guajardo
Guardado
Guerra
Guerrero
Guevara
Guillen
Gurule
Gutierrez
Guzman
Haro
Henriquez
Heredia
Hernadez
Hernandes
Hernandez
Herrera
Hidalgo
Hinojosa
Holguin
Huerta
Hurtado
Ibarra
Iglesias
Irizarry
Jaime
Jaimes
Jaquez
Jaramillo
Jasso
Jimenez
Jiminez
Juarez
Jurado
Laboy
Lara
Laureano
Leal
Lebron
Ledesma
Leiva
Lemus
Leon
Lerma
Leyva
Limon
Linares
Lira
Llamas
Loera
Lomeli
Longoria
Lopez
Lovato
Loya
Lozada
Lozano
Lucero
Lucio
Luevano
Lugo
Lujan
Luna
Macias
Madera
Madrid
Madrigal
Maestas
Magana
Malave
Maldonado
Manzanares
Mares
Marin
Marquez
Marrero
Marroquin
Martinez
Mascarenas
Mata
Mateo
Matias
Matos
Maya
Mayorga
Medina
Medrano
Mejia
Melendez
Melgar
Mena
Menchaca
Mendez
Mendoza
Menendez
Meraz
Mercado
Merino
Mesa
Meza
Miramontes
Miranda
Mireles
Mojica
Molina
Mondragon
Monroy
Montalvo
Montanez
Montano
Montemayor
Montenegro
Montero
Montes
Montez
Montoya
Mora
Morales
Morena
Mota
Moya
Munguia
Muniz
Munoz
Murillo
Muro
Najera
Naranjo
Narvaez
Nava
Navarrete
Navarro
Nazario
Negrete
Negron
Nevarez
Nieto
Nieves
Nino
Noriega
Nunez
Ocampo
Ocasio
Ochoa
Ojeda
Olivares
Olivarez
Olivas
Olivera
Olivo
Olmos
Olvera
Ontiveros
Oquendo
Ordonez
Orellana
Ornelas
Orosco
Orozco
Orta
Ortega
Ortiz
Osorio
Otero
Ozuna
Pabon
Pacheco
Padilla
Padron
Paez
Pagan
Palacios
Palomino
Palomo
Pantoja
Paredes
Parra
Partida
Patino
Paz
Pedraza
Pedroza
Pelayo
Pena
Perales
Peralta
Perea
Peres
Perez
Pichardo
Pino
Pineda

PATIENT INFORMATION cont.

Pizarro
Polanco
Ponce
Porras
Portillo
Posada
Prado
Preciado
Prieto
Puente
Puga
Pulido
Quesada
Quezada
Quinones
Quinonez
Quintana
Quintanilla
Quintero
Quiroz
Rael
Ramirez
Ramon
Ramos
Rangel
Rascon
Raya
Razo
Regalado
Rendon
Renteria
Resendez
Reyes
Reyna
Reynoso
Rico
Rincon
Riojas
Rios
Rivas
Rivera
Rivero
Robledo
Robles
Rocha
Rodarte
Rodrigez
Rodriguez
Rodriquez
Rojas
Rojo
Roldan
Rolon
Romero
Romo
Roque
Rosado
Rosales
Rosario
Rosas
Roybal
Rubio
Ruelas
Ruiz
Ruvalcaba
Saavedra
Saenz
Saiz
Salas
Salazar
Salcedo
Salcido
Saldana
Saldivar
Salgado
Salinas
Samaniego
Sanabria
Sanches
Sanchez
Sandoval
Santacruz
Santana
Santiago
Santillan
Sarabia
Sauceda
Saucedo
Sedillo
Segovia
Segura
Sepulveda
Serna
Serrano
Serrato
Sevilla
Sierra
Sisneros
Solano
Solis
Soliz
Solorio
Solorzano
Soria
Sosa
Sotelo
Soto
Suarez
Tafoya
Tamayo
Tamez
Tapia
Tejada
Tejeda
Tellez
Tello
Teran
Terrazas
Tijerina
Tirado
Toledo
Toro
Torres
Torrez
Tovar
Trejo
Trevino
Trujillo
Ulibarri
Ulloa
Urbina
Urena
Urias
Uribe
Urrutia
Vaca
Valadez
Valdes
Valdez
Valdivia
Valencia
Valentin
Valenzuela
Valladares
Valle
Vallejo
Valles
Valverde
Vanegas
Varela
Vargas
Vasquez
Vazquez
Vega
Vela
Velasco
Velasquez
Velazquez
Velez
Veliz
Venegas
Vera
Verdugo
Verduzco
Vergara
Viera
Vigil
Villa
Villagomez
Villalobos
Villalpando
Villanueva
Villareal
Villarreal
Villasenor
Villegas
Yanez
Ybarra
Zambrano
Zamora
Zamudio
Zapata
Zaragoza
Zarate
Zavala
Zayas
Zelaya
Zepeda
Zuniga

Tobacco History

NAACCR Version 9.1 Item 340, column 184

It is important to collect information on tobacco use for as many cancer patients as possible, regardless of diagnosis. This information can often be found in the medical record in the patient history and physical examination, anesthesia forms, nurses' notes, or social services notes. If necessary, the medical records of previous admissions should also be reviewed to see if there was past tobacco use for patients who are now non-users.

Use the following codes for cases diagnosed on or after January 1, 1996:

History	Code
never used tobacco	**0**
cigarette smoker, current	**1**
cigar or pipe smoker, current	**2**
snuff/chew/smokeless tobacco user, current	**3**
combination tobacco use, current	**4**
previous tobacco use	**5**
unknown	**9**

Occupation and Industry

Information on the occupation and industry of cancer patients can be used in research on possible links between workplace exposures and cancer. In addition, occupation and industry information can be useful in identifying groups of workers in particular need of preventive services regardless of whether or not their cancers were *caused* by their work. Because these studies rely on comparisons between different occupations and industries, it is important to collect accurate information for all cancer patients, regardless of age, sex, occupation or diagnosis. Specific occupational information can also help identify a patient being reported by multiple hospitals in different ways (with different name spellings or birthdates, for example).

Information on occupation and industry may often be found in the patient's history and physical exam, nurses' notes, social services notes, admitting sheet, etc. It may also be necessary to review pertinent sections of previous and subsequent admission records. The MCR collects information regarding the patient's usual occupation and industry (meaning the type of job held during most of the person's working life). This is not necessarily the patient's current or most recent job, especially for the elderly. Please make every attempt to determine the patient's usual occupation and industry.

Sometimes the medical record may only include the type of industry or employer's name. In such cases, enter the partial information that you have.

The following rules and guidelines apply to the occupation and industry fields:

- No occupation/industry information: When there is no information available for either occupation or industry, enter **Unknown** in both the "Usual Occupation" and "Usual Industry/Type of Business" fields. Do not use the term "none" which could mean that the individual has never worked. Please don't leave the fields empty or we will have to assume that the medical record has not yet been reviewed for this information.
- Incomplete information: You need not have specific information in both fields if it is unavailable. Enter **Unknown** in the "Usual Industry" field if information about occupation, but not industry, is available. Similarly, if only information about industry is available, enter **Unknown** for "Usual Occupation".
- More than one occupation/industry listed: Make every effort to determine the occupation and/or industry held during most of the patient's working life; otherwise, list all of the occupations reported as space allows.

- Only a current occupation/industry listed: If only the current or most recent occupation/industry is available, then record this. Adding the word **Current** to the narratives would be helpful in such cases.
- Housewives/persons at home: For patients who worked outside the home but spent most of their lives working in the home, use **Housewife** or **Househusband**. Record the patient's Usual Occupation outside the home if s/he spent most of their time working outside the home. If no information is available concerning an occupation outside the home, enter **At Home** or **Own Home** in the "Usual Industry" field, and **Housewife/husband** in the "Usual Occupation" field. (These terms are preferable to "homemaker" or "housekeeper", which can be confused with some occupations outside the home.)
- Retired persons: Review the patient's record for information on a past occupation, industry or employer. *Only* when there is no information available, enter **Retired** in both the "Usual Occupation" and "Usual Industry" fields.
- Unemployed/disabled persons: Attempt to find a former occupation or industry for persons currently unemployed or disabled. If it is known that the patient never worked, enter **Never Worked** in both "Usual Occupation" and "Usual Industry" fields. If no information is available, enter **Unknown** in both fields.
- Children: If the patient is a child, please enter **Child** in both fields. *Note*: It is no longer necessary to search for a parent's occupation/industry.
- Students: If the patient is an adult and is a student, review the patient's record for information about any job which the student may have held previously or concurrently with attending school. If no information is available, enter **Student** in both fields.
- Armed Forces employees: If known, enter the branch of service (Army, Navy, etc.) in the "Usual Industry" field; if the branch is not known, enter **Armed Forces** or **Military**. The Armed Forces include both civilian and military occupations: for civilian occupations, enter the appropriate description (e.g., nurse, payroll clerk, cook) in the "Usual Occupation" field; for military occupations, provide the rank (e.g., private, sergeant, captain), if available, as well as the type of job (e.g., pilot, tank driver).

Usual Occupation — NAACCR Version 9.1 field "Text--Usual Occupation", Item 310, columns 103-142

Enter the patient's "usual occupation", using up to 40 characters. "Usual occupation" refers to the type of job the individual was engaged in for most of his/her working life (e.g., accountant, truck driver, teacher, auto mechanic, textile machine operator). If the patient is not employed at the time of diagnosis, make every attempt to determine the longest held occupation. Do not enter general terms such as "student", "housewife", "retired", "unemployed" or "disabled" unless no other information regarding occupation can be found.

Although any information is useful, please provide as detailed a description of occupation as possible, because this will allow for more accurate coding of the information.

Examples:

Common entry	Preferable detailed entry
Analyst	computer systems analyst, financial analyst, food analyst
Computers	software engineer, computer assembler, computer repair
Construction worker	construction laborer, carpenter, plumber, electrician
Engineer	electrical engineer, chemical engineer, power plant engineer
Factory worker	assembler, lathe operator, stitcher, spray painter, riveter
Mechanic	auto mechanic, elevator mechanic, refrigeration mechanic
Technician	medical lab technician, computer technician, X-ray technician

Usual Industry / Type of Business

NAACCR Version 9.1 field "Text--Usual Industry", Item 320, columns 143-182

Enter the industry associated with the patient's Usual Occupation, using up to 40 characters.

"Industry/ Type of Business" refers to the kind of activity at a person's workplace. "Usual Industry" is the type of work or activity carried on by the business at the location where the individual worked in his/her Usual Occupation (e.g., accounting firm, trucking company, elementary school, auto repair shop, furniture manufacturer).

If the medical record contains the employer's name but does *not* specify what type of work went on there, then you may enter just the employer's name here. Do not abbreviate the name unless the employer is very commonly known. Also, if you cannot determine the type of work carried on by the employer, include the city/town where employed (e.g., **General Electric, Lynn, MA**) as this can help identify the employer's industry and distinguish different branches of a company having the potential for different occupational exposures.

Do not be concerned about trying to record the exact employer name and location for every patient! It is only *types* of industry/business that can be coded easily. When you can determine what type of work was carried out at the employer's location, you need only describe this *type* of work. You only have to try and specify the exact employer name/location if you *cannot* determine that employer's type of business/activity.

For self-employed persons, do not just enter "self" or "own company" here! Is the patient a self-employed artist, lawyer, writer, cook or dentist? Describe this person's type of business.

Avoid very general terms unless no other information can be found. Try to give sufficient detail so that someone can determine the actual business activity. For example, "automotive" could refer to manufacturing, a dealership, or repairs.

Examples:

Common entry	Preferable detailed entry
Electrical	electrical products manufacturing, electric utility, electrical contractor
Health care	hospital, doctor's office, home health service
Lumber	logging, sawmill, retail lumberyard
Sales	auto dealership, real estate sales, book seller, telemarketing
Transportation	bus company, taxi, trucking, airline, railroad, travel agency
Utility	electric utility, gas utility, water utility, communications utility

SECTION IV - TUMOR DATA

Primary Site Code

NAACCR Version 9.1 field "Primary Site", Item 400, columns 227-230

Enter the code for the site of origin from the Topography section of ICD-O-3. [Note that ICD-O-2 code C14.1, laryngopharynx, should not be used for diagnoses made on or after January 1, 1995. "Laryngopharynx" became an equivalent term under C13.9 (hypopharynx, NOS) as of this diagnosis date. Code C14.1 is not an ICD-O-3 code.]

Enter the site code that matches the narrative primary site indicated in the medical record, or the site code most appropriate for the case. Site codes are found in ICD-O-3's Numerical Lists - Topography section (pages 45-65) and in its Alphabetic Index (pages 105-218).

In ICD-O-3, primary site codes consist of the letter "C" followed by two digits, a decimal point, and a third digit. "**C**" should be entered, but the decimal point should *not* be entered.

Example: The primary site is "cardia of stomach". Look this up in the Alphabetic Index of ICD-O-3 under "stomach" (it's not under "cardia"), and the corresponding code is found to be "C16.0". Enter the four-character code **C160**.

Most sites include a third digit of "8" to be used for single tumors that overlap the boundaries of two or more anatomically contiguous subsites and whose exact origin cannot be determined, unless the combination of sites is specifically indexed elsewhere. For example, a tumor *originating* in the breast upper inner quadrant (C50.2) that has grown into the lower inner quadrant (C50.3) is assigned to the point of origin, **C502**; a tumor overlapping those two subsites whose exact origin is *not* determined would be assigned to **C508**. A carcinoma of the esophagus and stomach may be assigned to **C160** (esophagogastric junction) rather than a ".8" site.

Some ".8" sites cover a single tumor overlapping multiple primary sites rather than just subsites; for example, **C218** is used for a lesion overlapping the rectum (C20.9), anus (C21.0) and anal canal (C21.1), and **C148** covers the lip, oral cavity and pharynx; see Table 17 on page 25 of ICD-O-3 for more of these codes.

Most sites also include a third digit of "9" to be used when a subsite is not specified, and for multiple tumors originating in different subsites of the organ. Sites C14, C21, C22, C30, C38, C42, C48 and C76 do not have ".9" codes. Not all "NOS" site terms have codes ending in ".9", however; for example, "bile duct, NOS" is assigned to C24.0 and "pharynx, NOS" is C14.0. Some sites have *only* a ".9" code to define them (C01, C07, C12, C19, C20, C23, C33, C37, C52, C55, C56, C58, C61, C64, C65, C73, C80).

Site-Associated Morphologies

Some types of neoplasms are normally associated with certain primary sites. For example, hepatocellular carcinoma (8170/3) arises in the liver (C22.0); therefore, “hepatocellular carcinoma”, with no other statement about topography, should be coded to primary site **C220**. If the patient's medical record contains a morphologic term which has an associated site code in ICD-O-3, use this site code if no definite site is given or if only a metastatic site is given.

If the site specified by the physician differs from the associated site referred to in ICD-O-3, report the site specified by the physician.

Example: A medical record describes infiltrating duct carcinoma (8500/3) of the pancreas. Assign site code **C259** (or a more specific portion of the pancreas, if possible) even though ICD-O-3 suggests that the primary site breast (C50._) is most ordinarily associated with this morphology.

For a more extensive discussion of site-associated morphologies, see "Rule H" in the "Summary of Principal Rules for Using ICD-O" and "Coding Guidelines for Morphology" sections (page 21 and pages 32-33) in ICD-O-3.

Pseudo-topographic Morphology Terms

Some *morphology* terms contain, or seem to contain, primary site terminology; but do not let these terms confuse your choice of primary site code when the medical record indicates otherwise. Two examples are "adenocarcinoma, intestinal type" (8144/3) with an associated site of stomach (C16._) rather than an intestine site, and "adenoid basal carcinoma" (8098/3) with an associated site of cervix uteri (C53._) rather than adenoid. See specific examples on page 33 in ICD-O-3. Also, do not confuse some histologic adjectives like "endometrioid" with similar sounding site terms like "endometrium".

Primary-Versus-Secondary (Metastatic) and Ill-Defined Sites

A primary site should always be reported to the MCR, rather than a metastatic or secondary site. If the place of origin cannot be identified exactly, use the following guidelines:

- NOS subcategory (usually ends with ".9"): Use these codes when an organ subsite is not specified. Do *not* use the NOS code if a more descriptive term is available.
- Other and Ill-Defined Sites (C76.0-C76.8): These may be used for diagnoses that refer to ill-defined sites or body regions, such as "pelvis", "arm" or "head". These sites contain several types of tissue (bone, skin, soft tissue). If the type of tissue in which the cancer originated can be identified or inferred, code a more specific site than C76._.
- Unknown Primary Site (C80.9): If the primary site is unknown, and the only available information is from a metastatic/secondary site, enter **C809** [but see also the sections **Site-Associated Morphologies** (above) and **Special Primary Site Conditions** below].

Special Primary Site Conditions

Special rules apply to the following cases.

- Breast Duct, Lobular and Other Carcinomas: See pages 19-20 for a discussion of certain mixed lesions of the breast. If these lesions occur separately but simultaneously in different quadrants (subsites) of the same breast, enter site code **C509**.
- Subareolar / Retroareolar Tumors: Code to central portion of breast (**C501**) to indicate that the tumor arose in tissue beneath the nipple and not in the nipple (C50.0) itself.
- Familial Polyposis: When multiple carcinomas arising from familial polyposis involve multiple segments of the colon (or colon and rectum), code the primary site as colon, NOS (**C189**).
- Kaposi Sarcoma (9140/3): Code the primary site in which the tumor arises. If Kaposi sarcoma arises in the skin and another site simultaneously, or if no primary site is stated, code to skin, NOS (**C449**).
- Leukemias (*except* myeloid sarcomas) (9800-9920, 9931-9948): Code to bone marrow (**C421**). See "Rule E" on pages 20 and 26 in ICD-O-3. Myeloid sarcomas (9930) are coded to the site of the leukemic deposit.
- Cross-Indexed Lymphomas/Leukemias: ICD-O-3 coding has introduced some new wrinkles in assigning primary site for some closely related hematologic diseases. See details on pages 80-81 in this MCR Manual.

- Nodal Lymphomas: If no primary site is given but the lymphoma is described as nodal in origin (or is suspected of being nodal in origin), enter **C779** (lymph node, NOS) rather than C809. If a nodal lymphoma involves multiple lymph node regions at diagnosis, code to **C778** (lymph nodes of multiple regions). Nodal lymphomas include those arising in *lymphatic tissue* outside lymph nodes, such as in the tonsils, spleen, Waldeyer ring, small intestine Peyer patches, or thymus. See "Rule D" on page 26 in ICD-O-3.
- Extranodal Lymphomas: See "Rule D" on page 26 in ICD-O-3, and "ICD-O-3 Errata and Clarifications, 5/22/01, Rule D: coding extranodal lymphomas". Code to the appropriate extranodal site (e.g., stomach, lung, skin) when there is no nodal involvement of any kind, or if it is recorded that the origin was a specific extranodal site. If a lymphoma is described as extranodal in origin (or is suspected of being extranodal in origin), and lymph nodes are not involved, but the exact primary site cannot be determined, assign an unknown primary site (**C809**) rather than C77.9; but if lymph nodes *are* involved, an extranodal lymphoma may be coded to a lymph node primary site (**C77_**) if the specific extranodal point of origin cannot be determined.
- Lymphoreticular Process: For malignancies of the lymphoreticular process classified as *myeloproliferative* (arising in bone marrow), code to bone marrow (**C421**). For lymphoreticular process malignancies classified as *lymphoproliferative* (arising in lymph tissue), code to lymph node, NOS (**C779**). Code *unspecified* malignancies of the lymphoreticular process to reticuloendothelial system, NOS (**C423**).
- Melanomas (8720-8790): If the primary site is unknown, code to skin, NOS (**C449**) unless a non-skin associated primary site is given in ICD-O-3 (for example, a spindle cell melanoma of type A (8773) would be assigned to **C69_** unless a different site is specified in the record).
- Neuroblastomas (9500): Code neuroblastomas of ill-defined sites to the most likely site for each case. [Medulla of adrenal gland (**C741**) is a common site.] If the primary tumor's location is unknown, enter **C499** (connective, subcutaneous and other soft tissues, NOS).
- Prefixes: If a topographic term is modified by a prefix like "peri", "para", "pre", "supra", "infra" or similar modifiers, and the modified term is not specifically listed in ICD-O-3, assign the corresponding ill-defined site if the histology does not have an associated site. This rule also applies when tumors are described as originating "in the area of" or "in the region of" a specific site. (See Rule B on pages 20 and 25 in ICD-O-3.) For example, a tumor only described as arising "in the area of the rectum" should be assigned to **C763** (pelvis, NOS) because the type of tissue in which the tumor originated is not specified; "perirenal tissue" is assigned code **C480** in ICD-O-3, but a "perigastric" tumor should be assigned to **C762** (abdomen, NOS).

Inferred Primary Site and Experience

Lastly, text from the medical record cannot always be taken *literally* in assigning a primary site code. The need to assign a Primary Site Code to each cancer case is not always on the mind of individuals writing descriptions in the medical record. The general location of a tumor may be described rather than the specific type of tissue in which it arose, and sometimes a primary site must be *inferred* from information in the record. If your common sense and experience as a cancer registrar tell you that the medical record is indicating a very unusual primary site for a given diagnosis, be sure to verify this. For example, for simplicity a medical record may contain a phrase like "lung mesothelioma", "carcinoma of the mandible", "uterine sarcoma", "cholangiocarcinoma of the liver", "brain meningioma" or "lymphoma of the mediastinum" to describe the *general* anatomic location of a tumor rather than its exact organ or tissue of origin.

If the combination of morphology and primary site for a particular case is unusual enough to trip an automated edit, and if you have verified the information, please note in the "Comments/Narrative Remarks" field that this combination was verified, and indicate how it was verified.

If the primary site is unclear or doubtful in the medical record, document this in the "Comments/Narrative Remarks" field and indicate why you chose the site code that you're reporting. For example, you might say, "probable lung primary", or "ovarian or lung primary? treatment as for ovary", or "MD favors lung primary".

Laterality

NAACCR Version 9.1 Item 410, column 231

Use the following codes to classify the Laterality *of the primary site* at diagnosis:

Laterality	**Code**
not a paired site, including unknown primary	**0**
Right side is origin of cancer.	**1**
Left side is origin of cancer.	**2**
only one side involved, right or left origin not specified	**3**
bilateral involvement, but origin unknown -- and stated to be a single primary (including bilateral ovarian primaries of the same histologic type diagnosed within 2 months of each other; bilateral retinoblastomas; and bilateral Wilms tumors)	**4**
paired site, but no information concerning laterality; midline tumor in a paired site	**9**

Laterality must be coded for each case reported.

For an unknown primary site (C80.9), enter code **0**.

Code **4** should not be used for bilateral primaries for which separate abstracts are prepared, nor when the side of origin is *known*.

Example: For a left ovarian primary with metastasis to the right ovary, enter code **2** (not **4**).

Laterality codes **1**-**9** must be used for the sites in **Table IV.1** (next page) *except as noted*. Only major ("preferred") terms are listed in this table; however, Laterality must be coded for all ICD-O-3 terms at these sites unless specifically excluded in the table's text. Such exclusions are unpaired subsites and must be coded **0**.

Examples: Primary Site is carina (unpaired), C34.0 - enter Laterality code **0**.
Primary Site is main bronchus (paired), C34.0 - enter a Laterality code **1-9**.

For paired primary sites, the narrative field for Primary Site must include text that will verify the Laterality (see page 78).

Table IV.1 Paired Organ Sites

(also listed by code and alphabetically in Appendix B)

ICD-O-3 Code	Site
C07.9	Parotid gland
C08.0	Submandibular gland
C08.1	Sublingual gland
C09.0	Tonsillar fossa
C09.1	Tonsillar pillar
C09.8	Overlapping lesion of tonsil
C09.9	Tonsil, NOS
C30.0	Nasal cavity (excluding nasal cartilage, nasal septum)
C30.1	Middle ear
C31.0	Maxillary sinus
C31.2	Frontal sinus
C34.0	Main bronchus (excluding carina)
C34.1-C34.9	Lung
C38.4	Pleura, NOS
C40.0	Long bones of upper limb, scapula and associated joints
C40.1	Short bones of upper limb and associated joints
C40.2	Long bones of lower limb and associated joints
C40.3	Short bones of lower limb and associated joints
C41.3	Rib, clavicle and associated joints (excluding sternum)
C41.4	Pelvic bones and associated joints (excluding sacrum, coccyx and symphysis pubis)
C44.1	Skin of eyelid
C44.2	Skin of external ear
C44.3	Skin of other and unspecified parts of face (midline code **9**)
C44.5	Skin of trunk (midline code **9**)
C44.6	Skin of upper limb and shoulder
C44.7	Skin of lower limb and hip
C47.1	Peripheral nerves and autonomic nervous system of upper limb and shoulder
C47.2	Peripheral nerves and autonomic nervous system of lower limb and hip
C49.1	Connective, subcutaneous, and other soft tissues of upper limb and shoulder
C49.2	Connective, subcutaneous, and other soft tissues of lower limb and hip
C50.0-C50.9	Breast
C56.9	Ovary
C57.0	Fallopian tube
C62.0-C62.9	Testis
C63.0	Epididymis
C63.1	Spermatic cord
C64.9	Kidney, NOS
C65.9	Renal pelvis
C66.9	Ureter
C69.0-C69.9	Eye and adnexa
C74.0-C74.9	Adrenal gland
C75.4	Carotid body

Narrative Primary Site

NAACCR Version 9.1 field "Text--Primary Site Title", Item 2580, columns 3367-3406

Describe the exact primary site in narrative form, using up to 40 characters. (If you need more space, continue your description in another text field.) A primary (rather than secondary) site must be identified properly for each case.

Information regarding primary site can be found in several sections of the medical record, and care should be taken to locate the most specific and accurate identity of the primary site. This is most often found in the pathology report. If the medical record contains conflicting information regarding primary site, information in the pathology report should take precedence over information found in other sections of the medical record. If the primary site is still unclear, a physician should be consulted.

Do not use an inappropriate automatic text label for the Primary Site Code (such as "skin of upper limb and shoulder" instead of "**skin right forearm**") to complete this field. This text is used to verify Primary Site Codes and help identify multiple reports received for the same case with different site codes.

When a paired primary site is involved, *different* Laterality codes may be sent in by different facilities for the *same* case, making these appear to be reports of separate primaries. Important: We need text to verify the Laterality as well as the Primary Site Code for paired sites. Add text like "right" or "lt" to verify the Laterality for paired sites.

For colorectal primaries, if the exact location of the cancer is described by a distance measurement from the anal verge, please include this measurement with your text. This is important because: *each* code C18.0-C20.9 (twelve codes) represents a separate primary site; because some facilities/pathologists never use the site C19.9 (rectosigmoid junction); and because it is very common for a single colorectal primary to be reported by different facilities under different Primary Site Codes, causing these reports to look like separate cases.

If the combination of primary site and morphology is unusual enough to trip an automatic edit, include a note that this unusual combination has been verified by you as correct, and note how you verified it. These remarks could be in this field, the Narrative Histology/ Behavior/Grade field, or in Comments/Narrative Remarks.

If the primary site was unclear or doubtful in the record, indicate that here. If the primary site is truly unknown, enter "**unk primary site**" or some text that explains your choice of the code **C809**, such as "**liver mets found**", "**bx abdominal mass**" or "**possible lung or GI?**". (See the "Primary Site Code" section on pages 71-75.)

Histology / Behavior / Grade

ICD-O-2 Histologic Type Code

NAACCR Version 9.1 field "Histology (92-00) ICD-O-2", Item 420, columns 232-235

Refer to the Third Edition of this manual for coding diagnoses made before 2001.

ICD-O-3 Histologic Type Code

NAACCR Version 9.1 field "Histologic Type ICD-O-3", Item 522, columns 253-256

Enter the Histologic Type Code from the Morphology section of ICD-O-3. Histology codes appear in both the Numerical Lists--Morphology (pages 69-104 in ICD-O-3) and in the Alphabetic Index (pages 105-218).

Note: Both topography and morphology terms are included in the Alphabetic Index. Morphology codes are identified in this section with "M" preceding the code, but do not enter "M" in this field. Note that leukemias and lymphomas are *not* listed in the index under every possible wording of their associated terms; look first for these diseases in the index under the headings "leukemia" (pages 158-162) and "lymphoma (malignant)" (pages 166-171). Compound morphology terms may be listed in the index with only one order of terms, but the reverse order of terms is also implied. For example, "fibromyxosarcoma" appears in the index, but "myxofibrosarcoma" does not; the same code would be applied to both terms.

The histology is represented by a five-digit code consisting of two parts: the Histologic Type (4 characters) and the Behavior code (1 character). (Behavior is discussed on pages 84-88.) The MCR uses WHO (ICD-O) rules for coding morphologies.

If a reportable histologic term is listed in ICD-O-3 followed by the notation "[obs]" (obsolete), that term may still be used and coded.

When coding Histologic Type from a pathology report, use the best information from the *entire* report (microscopic description, final diagnosis, comments). Specific cytogenetic data may take precedence over other terms for hematologic malignancies. For example, many separate codes are assigned to acute myeloid leukemias having different cytogenetic abnormalities.

Cross-Indexed Lymphomas / Leukemias

Some lymphomas and leukemias are understood to be the same disease presenting differently at different stages of development. In ICD-O-3 these diseases are listed with separate codes and different terms, but they have cross-referencing notes saying "(see also M-9###/3)". The assignment of Histology (and Primary Site) for these cases will be important for central registries trying to group cases.

If one of these diseases is diagnosed only in the blood or bone marrow, assign the leukemia morphology (and Primary Site C42.1, bone marrow).

If one of these diseases is diagnosed only in any other tissue, assign the lymphoma morphology (and Primary Site corresponding to the involved tissue -- usually lymph nodes, lymphatic structures or other lymph tissues).

If one of these diseases is diagnosed in both blood/bone marrow and some other tissue(s), use the lymphoma morphology (and code Primary Site to the non-blood/bone marrow tissue involved).

The order of biopsies is *not* important in deciding which morphology and Primary Site Code to use. For example, if a positive lymph node biopsy is performed first at one facility, and then a bone marrow biopsy at another facility also finds the disease there, the third category above would apply. Therefore, obtaining diagnostic information from all facilities involved in the work-up of these cases may be especially important.

The cross-referenced ICD-O-3 lymphomas/leukemias (using just the "preferred" terms) are:

	9670/3	malignant lymphoma, small B lymphocytic, NOS
and	9823/3	B-cell chronic lymphocytic leukemia/small lymphocytic lymphoma (C42.1)
	9687/3	Burkitt lymphoma, NOS
and	9826/3	Burkitt cell leukemia (C42.1)
	9727/3	precursor cell lymphoblastic lymphoma, NOS
and	9835/3	precursor cell lymphoblastic leukemia, NOS (C42.1)
	9728/3	precursor B-cell lymphoblastic lymphoma
and	9836/3	precursor B-cell lymphoblastic leukemia (C42.1)
	9729/3	precursor T-cell lymphoblastic lymphoma
and	9837/3	precursor T-cell lymphoblastic leukemia (C42.1)

The following terms and codes are also cross-referenced in ICD-O-3:

9671/3 malignant lymphoma, lymphoplasmacytic
and 9761/3 Waldenstrom macroglobulinemia (C42.0)

Assign 9761 if diagnosed only in blood; assign 9671 if diagnosed only elsewhere; assign 9671 if both blood and other tissue are involved.

9675/3 malignant lymphoma, mixed small and large cell, diffuse [obsolete term]
and 9690/3 follicular lymphoma, NOS

If these two diagnoses are made within two months of each other, assign 9690. Differences in primary site and involved tissues do not matter for this pair.

9861/3 acute myeloid leukemia, NOS (FAB or WHO type not specified) (C42.1)
and 9930/3 myeloid sarcoma

Assign 9861 if diagnosed only in bone marrow; assign 9930 if diagnosed only elsewhere; assign 9930 if both bone marrow and other tissue are involved.

General Rule: Before coding Histologic Type, a determination should be made as to whether the case involves a single primary or multiple primaries. (See pages 14-27 for a detailed discussion.) *All* pathology reports for the primary under consideration should be used. Although the report from the most representative tissue is usually the best, sometimes all of the cancerous tissue may be removed at biopsy; in such cases, the biopsy report must be used. If a definitive statement of a more specific histologic type is found in the microscopic description or in the comments, the more specific histologic diagnosis should be coded; in ICD-O-3, this is *not necessarily* the higher code number.

When coding histology, also use the following rules.

Single Lesion, Multiple Histologies, Same Behavior: If two histologic types or subtypes in the same primary tumor have the same Behavior Code, proceed in the following order to select the appropriate Histologic Type Code:

1. Use a combination code, if one exists. ICD-O-3 contains *many* codes for describing single tumors containing multiple histologic types.

   Examples:

   - Invasive breast carcinoma, predominately lobular with foci of ductal carcinoma -
     Use the combination code for infiltrating duct and lobular carcinoma (**8522**/3).
   - Predominately giant cell carcinoma with a spindle cell component -
     Use the combination code for giant cell and spindle cell carcinoma (**8030**/3).

2. If there is no combination code for the histologies reported, compare the specificity of the terms. If one histologic term appears in ICD-O-3 as a non-specific "NOS term" (e.g., "carcinoma, NOS") and the other term is more specific, use the more specific term.

   Examples:

   - Adenocarcinoma (8140/3) with mucin-producing features -
     Code to mucin-producing adenocarcinoma (**8481**/3).
   - Invasive carcinoma, probably squamous cell type -
     Code to squamous cell carcinoma (**8070**/3) since this is more specific than invasive "carcinoma, NOS" (8010/3).

3. Code the histology of the majority of the tumor if there is no combination code and if neither term is equivalent to an "NOS term" in ICD-O-3. (The phrases "*predominately...*" and "*...with features of...*" are examples of phrases used to specify the majority of the tumor. Examples of phrases which do not describe the majority of the tumor are "*...with foci of...*", "*...areas of...*", and "*...elements of...*"; but such phrases are to be ignored when both terms are specific and no combination code exists.)

   Example: predominately leiomyosarcoma (8890/3) associated with foci of well-developed chondrosarcoma (9220/3) - Code the histology of the majority of the tumor -- **8890**/3. (The "NOS" in the terms for 8890/3 and 9220/3 are attached to *specific* histologies.)

4. If the three situations above do not apply, code the term that has the higher code number in ICD-O-3. Note that this is the easiest rule to remember, but it's the last choice you should make! This rule only applies to single solid tumors. This rule does not apply to hematologic diseases (9590-9989) because within this code range the higher code number is not necessarily the more specific histology. For 9590-9989, assign the code of the more specific term.

   Examples: adenosquamous carcinoma (8560/3) and mixed small cell carcinoma (8045/3) - Code as adenosquamous carcinoma (**8560**/3).

   same disease described as mantle cell lymphoma (9673/3) and diffuse large B-cell lymphoma (9680/3) - Code as **9673**/3 because mantle cell lymphoma is more specific.

Single Lesion, Multiple Histologies, Different Behaviors: If the ICD-O-3 Behavior Codes are different, select the morphology code with the higher Behavior Code number.

Example: squamous cell carcinoma *in situ* (8070/2) and papillary squamous cell carcinoma (8052/3) - Code as papillary squamous cell carcinoma (**8052**/3).

Exception: If the histology of the invasive component is a non-specific "NOS term" (e.g., carcinoma, adenocarcinoma, melanoma), and the noninvasive component has a more specific term enter an invasive Behavior Code with the more specific Histologic Type.

Example: squamous cell carcinoma *in situ* (8070/2) with areas of invasive carcinoma (8010/3) - Code as squamous cell carcinoma (**8070**/3).

Multiple Lesions (with multiple histologies) Considered a Single Primary: When multiple tumors are considered a single primary, use the following rules:

1. If one lesion is described with a non-specific "NOS term" (e.g., carcinoma, adenocarcinoma, sarcoma), and the other lesion is described with a more specific term (e.g., *large cell* carcinoma, *mucinous* adenocarcinoma, *spindle cell* sarcoma), code to the more specific term.

2. Some colon and rectum primaries are an exception to the above rule:

   When both an adenocarcinoma (8140/3) and an adenocarcinoma (*in situ* or invasive) in an adenomatous polyp (8210) or an adenocarcinoma (*in situ* or invasive) in (tubulo)villous adenoma (8261, 8263) arise in the same segment of the colon or rectum, code as adenocarcinoma, NOS (**8140**/3) rather than the more specific histology.

   When both a carcinoma (8010/3) and a carcinoma (*in situ* or invasive) in an (adenomatous) polyp (8210) arise in the same segment of the colon or of the rectum, code as carcinoma, NOS (**8010**/3) rather than the more specific histology.

3. If the histologies of multiple lesions can be represented by a combination code [e.g., a lobular carcinoma (8520/3) and a mucinous carcinoma (8480/3)], use that combination code (**8524**/3).

ICD-O-2 Behavior Code	NAACCR Version 9.1 field "Behavior (92-00) ICD-O-2", Item 430, column 236

Refer to the Third Edition of this manual for coding diagnoses made before 2001.

ICD-O-3 Behavior Code — NAACCR Version 9.1 field "Behavior Code ICD-O-3", Item 523, column 257

The fifth digit of the ICD-O-3 morphology code (after the slash) is the Behavior Code. Use the best information available from the entire pathology report to code behavior.

The MCR requires that all cancers with a Behavior Code of **2** or **3** be reported. If a histology appears in ICD-O-3 with *only* a Behavior Code of **0** or **1** but a pathologist has described the cancer as "malignant", you may change the Behavior Code to **3** and report the case (for example, a confirmed "malignant tumorlet" would be reportable as 8040/**3**). (See "Rule F" on pages 20 and 29 of ICD-O-3.) As also noted on page 9 in this MCR Manual, the following are MCR reportability exceptions:

Morphology	
8000-8005	malignant neoplasms, NOS, of the skin (C44.0-C44.9)
8010-8046	epithelial carcinomas of the skin (C44.0-C44.9)
8050-8084	papillary and squamous cell carcinomas of the skin (C44.0-C44.9)
8090-8110	basal cell carcinomas of any site except genital sites

Note: The above lesions are reportable for skin of the genital sites -- vagina, clitoris, vulva, prepuce, penis, and scrotum (C52.9, C51.0-C51.9, C60.0, C60.9, and C63.2).

In addition, the MCR requires that cases with Behavior Codes **0** or **1** of the meninges, brain, and central nervous system (C70._, C71._, and C72._) be reported.*

Beginning with cases diagnosed on or after January 1, 1998, the MCR no longer requires reporting of carcinoma *in situ* of the uterine cervix (C53._ with histologic type codes 8000-8110 and Behavior Code **2**). This includes cases of cervical intraepithelial neoplasia, Grade III (CIN III), pre-invasive cervical neoplasia and squamous intraepithelial lesions. Invasive cervical carcinomas are still reportable.

Beginning with cases diagnosed on or after January 1, 1998, the MCR also no longer requires cases of anal, vaginal or vulvar intraepithelial neoplasia, Grade III (AIN, VAIN, VIN, histology 8077/2), nor prostatic intraepithelial neoplasia, Grade III (PIN, histology 8148/2). (This "Grade III" does not refer to the histopathologic grade/differentiation; it refers to the highest category of dysplasia in the Bethesda system for non-invasive lesions.)**

* Pituitary and pineal glands and craniopharyngeal duct (C75.1-C75.3) are not included in this requirement, even though the Central Brain Tumor Registry of the U.S. collects cases of benign and uncertain behavior for these sites. For primary sites C75.1-C75.3, only report cases with invasive or *in situ* behavior to the MCR.

** Central registries are supposed to continue collecting VAIN III, VIN III and AIN cases, but the MCR has decided against this. At the MCR, it is not easy to tell if cases reported with these descriptors are actually of a high enough severity of dysplasia to be truly coded with a Behavior Code of /2.

The codes for classifying Behavior are shown here:

Behavior	**Code**
benign	**0**
uncertain whether benign or malignant *borderline malignancy *low malignant potential *uncertain malignant potential	**1**
carcinoma *in situ* intraepithelial non-infiltrating non-invasive	**2**
malignant, primary site	**3**
malignant, metastatic site malignant, secondary site	** 6
malignant, uncertain whether primary or metastatic site	** 9

* but pilocytic astrocytomas (9421/1) are coded as if malignant (**3**)

** This is a reportable behavior, but enter code **3** for the MCR. Behavior Code "6" indicates a metastatic site. If the only specimen is from a metastatic site, code the histologic type of the metastatic site but enter **3** for Behavior Code.

Example: The patient had a biopsy of the liver showing metastatic adenocarcinoma (8140), and the primary site is unknown (C80.9). Code the histology as adenocarcinoma (8140/**3**).

Each of these Behavior Codes appears in ICD-O-3 next to varying number of histology codes:
about 290 histology codes appear with a /**0** benign behavior;
about 150 histology codes appear with a /**1** uncertain behavior;
only 30 histology codes appear with a /**2** *in situ* behavior;
about 550 histology codes appear with a /**3** malignant behavior;
only 6 codes appear with a /**6** metastatic behavior (8000, 8010, 8070, 8140, 8480, 8490);
only 3 codes appear with a /**9** primary/secondary uncertainty behavior (8000, 8010, 8800).

Remember that the Behavior Code which appears next to a histologic type code in ICD-O-3 may always be changed to reflect the true behavior of the cancer; thus, for example, not every histology which could be found metastatically in the body is shown with a /6.

In Situ -- The following terms indicate *in situ* /**2** behavior (ICD-O-3):

- adenocarcinoma in an adenomatous polyp with no invasion of stalk (8210/2)
- Bowen disease (8081/2) (C44._)
- Clark's Level 1 for melanoma, limited to epithelium (8720/2)
- comedocarcinoma, noninfiltrating (8501/2) (C50._)
- confined to epithelium
- glandular intraepithelial neoplasia, grade III (8148/2)**
- Hutchinson melanotic freckle, NOS (8742/2) (C44._)
- intracystic, noninfiltrating (for example, a carcinoma 8504/2)
- intraductal*
- intraepidermal, NOS (except intraepidermal epithelioma of Jadassohn 8096/0; intraepidermal nevus 8740/0)
- intraepithelial, NOS
- intratubular malignant germ cells; intratubular germ cell neoplasia (9064/2) (C62._)
- involvement up to but not including the basement membrane
- lentigo maligna (8742/2) (C44._)
- lobular neoplasia (C50._)
- lobular, noninfiltrating (C50._)
- noninfiltrating
- noninvasive
- no stromal involvement (except squamous cell carcinoma in situ with questionable stromal invasion 8076/2)
- papillary, noninfiltrating or intraductal
- precancerous melanosis (8741/2) (C44._)
- Queyrat erythroplasia (8080/2) (C60._)
- Sertoli-Leydig cell tumor of intermediate differentiation (8631/2)
- squamous intraepithelial neoplasia, grade III (8077/2) [lower-grade (< grade III) neoplasias do not warrant the use of /2]
- Stage 0

* except in these terms:

8453/0 intraductal papillary-mucinous adenoma (C25._)
8453/1 intraductal papillary-mucinous tumor with moderate dysplasia (C25._)
8453/3 intraductal papillary-mucinous carcinoma, invasive (C25._)
8503/0 intraductal papilloma
8503/3 intraductal papillary adenocarcinoma with invasion (C50._)
8505/0 intraductal papillomatosis, NOS; diffuse intraductal papillomatosis
8543/3 Paget disease and intraductal carcinoma of breast (C50._)

Microinvasion

Code microinvasion (the earliest stage of invasion) as malignant (**3**), not *in situ.* For the diagnosis "microinvasive squamous cell carcinoma" (a common form of cervical cancer), use the morphology code provided by ICD-O-3 (8076/3).

Malignant Terms

Forms of the terms "invasive", "leukemia", "malignant" and "metastatic" are generally synonymous with Behavior Code **3** (or /6 reported as /**3**). The following terms are exceptions: metastasizing leiomyoma (8898/1); invasive hydatidiform mole or invasive mole, NOS (9100/1) (C58.9); and T-cell large granular lymphocytic leukemia (9831/1).

Behavior and Staging Differences

It may be difficult in medical records to distinguish a description of a tumor's behavior from a description of its stage. The term "*in situ*", for example, could be describing behavior, extent of disease, or both. The Behavior Code collected by the MCR reflects the WHO (ICD-O-3) behavior of the disease. The behavior of a case as reflected in its staging codes may differ. For example, mammary Paget disease with no underlying tumor found (8540/**3**) is AJCC-staged as *in situ* disease; mammary Paget disease with an underlying intraductal carcinoma (8543/**3**) is also AJCC-staged as *in situ* disease; the *in situ* staging and Behavior Code **3** are compatible for these cases, and it is the ICD-O behavior /**3** that is collected. If a pathologist specifically describes "Paget disease, *in situ*" and wants the *ICD-O Behavior* coded as /**2**, then that is permissible under the ICD-O "matrix" rule ("Rule F" on pp. 20 and 29-30 in ICD-O-3), but this is not the same as a physician describing the AJCC *staging* of Paget disease as *in situ.* If the behavior is unclear or not stated in the record, use the default ICD-O-3 Behavior code.

ICD-O-3 Conversion Flag

NAACCR Version 9.1 Item 2116, column 1020

This coded field describes the origin of the ICD-O-3 codes (Histologic Type Code and Behavior Code) within a case record. Your data system may fill this field automatically, but you should also be able to change this field manually when appropriate (as when you have visually reviewed and corrected an automatic code conversion). It is impossible for us to describe exactly how each hospital data system may be handling the ICD-O-2 and ICD-O-3 fields. The codes* for the ICD-O-3 Conversion Flag follow:

Conversion Circumstances	**Code**
No conversion took place. (ICD-O-3 fields are empty.)	**leave empty**
Case was originally coded in ICD-O-3.	**0**
Case was coded in ICD-O-2; ICD-O-3 fields were filled automatically by conversion program; the ICD-O-3 codes have not been reviewed by a registrar.	**1**
As for code **1**, but a registrar has reviewed the ICD-O-3 codes.	**3**

* Codes **2** and **4** are also allowed, although they are not applicable because they refer to non-existent primary site code conversions between ICD-O-2 and ICD-O-3.

Grade / Differentiation / Immunophenotype Code

NAACCR Version 9.1 field "Grade", Item 440, column 237

The Grade or Differentiation of a tumor describes the tumor's resemblance to normal tissue. A well differentiated (Grade I) tumor is the most like normal tissue. The immunophenotype of a lymphoma or leukemia describes the type of cell in which the disease developed.

Grade / Differentiation

The MCR uses WHO (ICD-O)/ROADS Manual rules for assigning Grade as the sixth digit of the ICD-O morphology code -- not AJCC rules. In the *AJCC Cancer Staging Manual, 5th Edition* there are rules for assigning a "grade" code of "G1", "G2", "G3", "G4" or "G3-4"; but these are AJCC staging-related grade codes, and are not the same type of Grade code collected by the MCR and described on page 67 of ICD-O-3 or pages 111-113 of the ROADS.

Examples: The *AJCC Cancer Staging Manual, 5th Ed*. grade for prostate cancer with Gleason score 7 is code "G3-4"; the Grade reported to the MCR is **2** (see p. 93 in this MCR manual, or p. 113 in the ROADS).

On p. 8 of the *AJCC Cancer Staging Manual, 5th Ed*., certain histologies are always "by definition ... G4" (undifferentiated carcinoma, small cell carcinoma, large cell carcinoma of lung, Ewing sarcoma of bone and soft tissue, and rhabdomyosarcoma of soft tissue). These morphologies should be reported to the MCR with the Grade that is indicated in the medical record. That is, a "poorly differentiated small cell carcinoma" would have Grade code **3**; the same diagnosis with no indication of Differentiation would have Grade code **9**.

The term "grade" in a medical record does *not* always describe a tumor's differentiation and thus should *not* always be coded here. It can be confusing. For example, in describing some diseases, pathologists use "grade" as a synonym for "type" or "category" (as in different "grades" of nodular sclerosing Hodgkin lymphoma, follicular lymphoma, or intraepithelial neoplasia). The word "differentiation" is a more reliable indicator of the morphology code's sixth digit Grade that we collect (as in "poorly differentiated lymphocytic lymphoma", code **3**). Terms like "high grade" or "low grade", when describing lymphomas or leukemias, are *not* coded in this field, but if a histologic term is listed in ICD-O-3 with the words "high grade" or "low grade" incorporated into the term (as in 8931/3, "endometrial stromal sarcoma, low grade"), then that *should* be coded here (code **2** for low grade, **4** for high grade).

A "nuclear" grade may be recorded in the medical record (often for breast and renal cancers, as in Fuhrman or Van Nuys nuclear grades.) Rather than characterizing the whole tumor, nuclear grade only describes cell nuclei activity within the tumor. Nuclear grades are not considered completely comparable with the "sixth digit" ICD-O Grade field collected by the MCR, so do not code nuclear grades here.

A Grade recorded in a histopathology report takes precedence over one in a cytology report. Code the Grade or Differentiation as stated in the final pathologic diagnosis.

Example: Microscopic Description: moderately differentiated squamous cell carcinoma with poorly differentiated areas

Final Pathologic Diagnosis: moderately differentiated squamous cell carcinoma

Code moderately differentiated (**2**).

Exception: If the Differentiation is NOT stated in the final pathologic diagnosis, use the information from the microscopic description or comments.

Code the Grade or Differentiation from the pathologic examination of the *primary* tumor only -- not from metastatic sites (because cells at a metastatic site may have a different amount of Differentiation than those in the primary site). If the primary site is unknown, always code the Grade/Differentiation as unknown (**9**).

Example: A metastatic liver lesion is specified as "poorly differentiated carcinoma", and the primary site cannot be identified. Enter code **9** for Grade because the Differentiation *at the primary site* cannot be determined.

When the pathology report(s) list(s) more than one Grade, code to the highest Grade code given, even if it does not represent the majority of the lesion. This may result from different degrees of Differentiation between biopsy and resection specimens.

Examples:

- moderately to poorly differentiated carcinoma - Code as poorly differentiated (**3**).
- combination of Grades I and II carcinoma - Code as moderately differentiated (**2**).
- predominantly Grade I, focally Grade II - Code as Grade II (**2**).

Code the Grade for *in situ* lesions if available. Because this is not usually considered to be of importance in *in situ* cases, Grade is seldom recorded; but do not automatically make the Grade **9** if a degree of Differentiation *is* specified for an *in situ* case.

Grade / Immunophenotype

Codes **5**, **6, 7** and **8** define cell origins for leukemias and lymphomas. For these types of cancer, cell classifications have precedence over grades or differentiation (i.e., a "poorly differentiated T-cell lymphoma" should have code **5** for the immunophenotype rather than **3** for the differentiation). Do NOT use "high grade," "low grade," or "intermediate grade" descriptions of lymphomas as a basis for coding this field.

In ICD-O-3, "the cell lineage is implicit in the four-digit morphology code" (see page 14 in ICD-O-3). Some *terms* in ICD-O-3 have an implied cell type origin; but note that not *all* terms listed with the same morphology code in ICD-O-3 necessarily should be coded with the same immunophenotype. For example, the preferred term for 9680/3 is "malignant lymphoma, large B-cell, diffuse, NOS", but not all of the synonyms and equivalent terms also listed for that code should necessarily be coded with B-cell origin. If the medical record does *not* indicate an immunophenotype, use code **9**.

The Grade/Differentiation/Immunophenotype codes are as follows:

Description	**Grade/Cell Type**	**Code**
well differentiated differentiated, NOS	Grade I	**1**
moderately differentiated moderately well differentiated intermediate differentiation	Grade II	**2**
poorly differentiated dedifferentiated	Grade III	**3**
undifferentiated anaplastic	Grade IV	**4**
for lymphomas and leukemias: T-cell, T-precursor	T-cell origin	**5**
for lymphomas and leukemias: B-cell, Pre-B, B-precursor	B-cell origin	**6**
for lymphomas and leukemias: null cell, non T-non B	Null cell origin	**7**
for lymphomas and leukemias: NK cell	Natural killer cell origin	**8**
grade/differentiation/cell type not determined, not stated, not applicable; unknown primary site; non-malignant disease (Behaviors /0, /1)	unknown	**9**

MRI / PET / Brain Tumor Grading

It may be possible to establish tumor Grade through magnetic resonance imaging (MRI) or positron emission tomography (PET) when there is no tissue diagnosis. (Brain tumors may be graded using these methods.) If there is *no* tissue diagnosis, but the Grade or Differentiation is indicated on an MRI or PET report, use that Grade; if there *is* a tissue diagnosis, however, do not use the Grade from any other source. Note that only malignancies (behaviors /2, /3) are Graded -- for benign disease and tumors of uncertain behavior (/0, /1), assign code **9**.

WHO developed a malignancy scale for central nervous system tumors that includes a "WHO grade" (of I, II, II-III, III, III-IV or IV). See the explanation and Table 27 on pages 39-40 of ICD-O-3. This "WHO grade" is not coded in the ICD-O Grade field that we collect. For example, an anaplastic meningioma has a "WHO grade" III but would be coded **4** in the ICD-O Grade field because of the term "anaplastic". If a brain/CNS tumor is described only by its "WHO grade", it should be assigned ICD-O Grade code **9**. Look for terminology in the medical record that is describing the tumor's ICD-O Grade, such as the terms shown in the table below.

Other Grade/Differentiation Terminology

When there is variation in the usual terms for Grade or Differentiation, use the following conversions:

Terminology	Grade	Code
low grade partially well differentiated	I-II	**2**
medium grade intermediate grade	II-III	**3**
moderately undifferentiated relatively undifferentiated	III	**3**
high grade	III-IV	**4**

A Grade may be recorded as "2/3" (Grade II in a three-grade system) or "II/IV" (Grade II of a four-grade system). For these classifications, use the following codes:

Grade	Code
I / III	**2**
II / III	**3**
III / III	**4**

Grade	Code
I / IV	**1**
II / IV	**2**
III / IV	**3**
IV / IV	**4**

Breast Tumors and Scarff Bloom-Richardson Grading

The Differentiation of a breast tumor may be described using the Scarff Bloom-Richardson (SBR or BR) grading system. (This grading system may also be called Bloom-Richardson, modified Bloom-Richardson, Elston-Ellis modification of Bloom-Richardson, Nottingham grade, or Nottingham modification of Bloom-Richardson.) Use the following codes:

Bloom-Richardson Score	Bloom-Richardson Grade	Differentiation	Code
3, 4, 5	low grade	well differentiated	**1**
6, 7	intermediate grade	moderately differentiated	**2**
8, 9	high grade	poorly differentiated	**3**

Prostate Tumors and Gleason's Score or Pattern

Both the tumor Differentiation and Gleason's Score and/or Pattern may be given. Code the tumor Grade/Differentiation when it is available, but use the following conversions when you have only the Gleason's Score (2-10):

Gleason's Score	Grade and Differentiation	Code
2, 3, 4	I well differentiated	**1**
5, 6, 7	II moderately differentiated	**2**
8, 9, 10	III poorly differentiated	**3**

If only the predominate pattern (1-5) is mentioned, use the following conversions:

Gleason's Pattern	Grade and Differentiation	Code
1, 2	I well differentiated	**1**
3	II moderately	**2**
4, 5	III poorly differentiated	**3**

Narrative Histology / Behavior / Grade

NAACCR Version 9.1 field "Text--Histology Title", Item 2590, columns 3407-3446

Enter the histology, behavior and grade/differentiation/immunophenotype in narrative form, using up to 40 characters. If you run out of room, continue the text in another Narrative field.

Do not use an automatic text label to complete this field; instead, this field should contain histology, behavior and grade/differentiation information as derived from the medical record. The information in this field is used to verify the Histologic Type, Behavior and Grade Codes.

Information regarding histology, behavior and grade is primarily found in the pathology report. Use the most specific and accurate information. If the medical record contains conflicting information regarding histology, behavior or grade, information in the pathology report should take precedence. If histology, behavior or grade is still unclear, a physician should be consulted. If the diagnosis you are documenting here was uncertain or doubtful, indicate this here (space permitting) or in the Comments/Narrative Remarks field.

If the combination of primary site and morphology is unusual enough to trip an automatic edit, include a note that this unusual combination has been verified by you as correct, and note how you verified it. These remarks could be in this field, the Primary Site Narrative, or the Comments/Narrative Remarks field.

Date of Diagnosis

NAACCR Version 9.1 Item 390, columns 219-226

Enter the date, in MMDDCCYY format, on which a recognized medical practitioner first stated that the patient had the reported cancer, whether or not the diagnosis was ever histologically confirmed, and whether or not the diagnosis was made at the reporting hospital or before admission there.

Use **9**'s to code unknown parts of the date (such as 06**99**2001 or **9999**2001).

For a diagnosis made *in utero*, use the eventual date of birth as the Date of Diagnosis.

For cases of Class 5 (first diagnosed at autopsy), enter the date of death as the Date of Diagnosis, even if the autopsy was actually performed on a later date.

If a patient receives cancer-directed therapy before definitive diagnosis, use the date on which therapy started as the Date of Diagnosis.

Do not change the Date of Diagnosis if the diagnosis was confirmed at a later date.

Example: A patient has a mammogram on September 15, 2001, revealing a mass in the lower inner quadrant "compatible with carcinoma". On September 22 the patient has an excisional biopsy that confirms infiltrating duct carcinoma. The Date of Diagnosis is **09152001**.

If, however, a physician reports that, in retrospect, a patient had cancer at an earlier date, use that earlier date as the Date of Diagnosis (i.e., backdate the diagnosis).

Example: In June of 1999, a patient has a total abdominal hysterectomy for endometriosis. The patient is admitted in October of 2001 with abdominal pain and distension. A laparoscopy with omental biopsy reveals metastatic cystadenocarcinoma. A review of the 1999 hysterectomy shows an area of cystadenocarcinoma in the left ovary. Backdate the diagnosis to June 1999. (Enter **06991999**.) Cystadenocarcinomas diagnosed in 1999 are reportable to the MCR.

Vague Dates

Estimate the Date of Diagnosis if you do not know the exact date, and mention in the Comments/Narrative Remarks that the date reported is an estimate. Approximation is preferable to entering an unknown date. The MCR cannot determine if a particular case is reportable to us without at least a year of diagnosis being estimated. Use the following procedures if information is limited to descriptive terms:

Descriptive Term	**Date Coded**
spring	April
middle of the year	July
fall / autumn	October
winter	Try to determine if this means the beginning or end of the year, and then code January or December.

Class of Case

NAACCR Version 9.1 Item

Class of Case divides registry data into analytic and nonanalytic categories. Analytic cases (**0**, **1**, **2**) are those included on treatment and survival analyses. Nonanalytic cases (**3**, **4**, **5**, **6**, **8**, **9**) are those that are not included in treatment and survival analyses. The code **6** became valid for the MCR for diagnoses made as of 1996; the ACoS requirements pertaining to Class 6 cases have undergone perpetual revision since that time; they are now considered nonanalytic (for diagnoses made in 2000 and thereafter). The MCR requires hospitals to report nonanalytic cases (Class 6 cases are optional), but only in an abbreviated fashion (see page 7).

Code	Class	Description
0	Class 0	First diagnosed at reporting institution since its reference date, and all of the first course of therapy given elsewhere. Cases include: • patients who choose to be treated elsewhere • patients who are referred elsewhere for treatment for any reason (e.g., lack of special equipment, proximity of a patient's residence to the treatment center, or financial, social or rehabilitative considerations)
1	Class 1	First diagnosed at reporting institution since its reference date, and either (a) received all or part of the first course of therapy at the reporting institution, or (b) was never treated. Cases include: • patients who received all or part of their first course of therapy at the reporting institution • patients who refused any treatment • patients who were untreatable because of age, advanced disease or other medical conditions • Specific treatment was recommended but not received at the reporting institution, and it is unknown if treatment was ever administered. • It is unknown if treatment was recommended or administered. • patients diagnosed at the reporting institution prior to the reporting institution's reference date, and all or part of the first course of therapy was received at the reporting institution after the reporting institution's reference date • patients who were first diagnosed and had staging workup at the reporting institution, and all or part of the first course of therapy was received in a staff physician's office. • patients who were first diagnosed in a staff physician's office and then treated at the reporting institution • patients who were diagnosed and whose treatment was planned at the reporting institution, and treatment was delivered elsewhere in accordance with the reporting institution's treatment plan

Code	Class	Description
2	Class 2	First diagnosed elsewhere, and either (a) received all or part of the first course of therapy at the reporting hospital after its reference date, or (b) planning of the first course of therapy was done primarily at the reporting hospital. Cases include: • patients diagnosed at another hospital but not treated until admission to the reporting hospital, regardless of the interval between diagnosis and treatment • patients diagnosed and surgically treated at another hospital, then admitted to the reporting hospital for radiation therapy that completes planned first course of treatment • any cases the reporting hospital considered to be analytic (i.e., the planning/-management decisions were made at the hospital, even if treatment was administered elsewhere, and the follow-up care is the responsibility of the reporting hospital)
3	Class 3	First diagnosed at another institution, and either (a) entire first course of therapy was given elsewhere, (b) patient was never treated, or (c) unknown if treated. Cases include: • patients diagnosed and first course of therapy completed elsewhere, later admitted to the reporting hospital with disease • no information available on patient's first course of therapy, and patient is now treated or managed at the reporting institution • The reporting institution is treating or managing the recurrence, progression, or subsequent treatment of a previously diagnosed malignancy. *Note*: Class 3 cases are <u>not reportable</u> to the MCR if originally <u>diagnosed before 1995</u>.
4	Class 4	First diagnosed and first course of therapy at reporting institution before its reference date. Cases include: • Cases whereby the reporting facility manages or treats a recurrence or progression of the disease <u>after</u> the facility's reference date. *Note*: Class 4 cases are reportable to the MCR <u>only</u> if the reporting institution's reference date is later than the MCR's reference date of January 1, 1982.
5	Class 5	First diagnosed at autopsy. Cases include: • incidental finding of cancer at autopsy
6	Class 6	Patients who were diagnosed and received all of first course of treatment in a staff physician's office. *Note:* This extends only to members of your institution's medical staff. If a physician holds multiple staff appointments, s/he must assign reporting responsibility to one institution. *Note*: Class 6 cases are not required for the MCR, but <u>if your facility collects</u> them we <u>do</u> want them to be reported as for any nonanalytic case. Any Class 6 case originally <u>diagnosed before 1996</u> is <u>not reportable</u> to the MCR.
8	Class 8	By death certificate only. <u>This code is for MCR use only</u>. Cases include: • Diagnoses based on death certificates only.
9	Class 9	Unknown. Cases include: • unknown if previously diagnosed or treated • previously diagnosed, but date unknown

Institution Referred From

NAACCR Version 9.1 Item 2410, columns 1697-1711

This coded field helps the MCR understand the interactions a patient has had with multiple facilities and where we could look for further information we might need about a case.

This field records where a patient was diagnosed or received any initial treatment for this case before being seen at your facility. If you know that a patient was seen at another facility for this case prior to your contact with the patient, please report that information even if the patient did not have a *formal referral* to your hospital. If a patient was seen at more than one facility before yours, record just the hospital where s/he was seen most recently before your facility.

If this case was diagnosed at your facility, was seen first at your facility, or has been seen only at your facility (cases of Class 0, 1, 4, 5), this field may be left empty (or may be filled with zeroes).

This field should contain a ACoS/COC Facility Identification Number (FIN), but the special code assigned to a Massachusetts facility by the MCR (usually four digits) is also acceptable if your data system can produce it. See page 32 and Appendix G for FINs and MCR codes.

For patients previously seen at a U.S. facility outside Massachusetts, this field should contain a FIN. [The ACoS website (http://web.facs.org/cpm) has a "search feature" for FIN codes of facilities with approved cancer programs.] If you know that the patient came to you from another state but you can't identify or code the particular institution, please enter the other state's central registry code number (see Appendix G for these codes).

If you know that a patient was referred to your hospital but you cannot identify that facility (or its code number), fill this field with **9**'s. This includes patients coming to you from a facility in a foreign country or a physician office/private practice.

If the facility a patient was referred from is now closed or no longer seeing cancer patients, there may still be a code for the facility in Appendix G that you may fill in here.

Institution Referred To

NAACCR Version 9.1 Item 2420, columns 1712-1726

This coded field helps the MCR understand the interactions a patient has had with multiple facilities and where we could look for further information we might need about a case.

This field records where a patient was referred by your facility for this case. This does not include just *formal referrals*; if you know that the patient was seen elsewhere after being seen at your hospital, code that facility. If the patient went to multiple facilities after yours, code just the one to which s/he went most immediately after yours.

For patients not being seen later at any other facility (cases of Class 1, 3, 4, 5), this field may be left empty (or may be filled with zeroes).

This field should contain a ACoS/COC Facility Identification Number (FIN), but the special code assigned to a Massachusetts facility by the MCR (usually four digits) is also acceptable if your data system can produce it. See page 32 and Appendix G for FINs and MCR codes.

For patients seen later at a U.S. facility outside Massachusetts, this field should contain a FIN. [The ACoS website (http://web.facs.org/cpm) has a "search feature" for FIN codes of facilities with approved cancer programs.] If you know that the patient is going to another state but you can't identify or code the particular institution, please enter the other state's central registry code number (see Appendix G for these codes).

If you know that a patient was referred elsewhere but you cannot identify that facility (or its code number), fill this field with **9**'s. This includes patients going to a facility in a foreign country or a physician office/private practice.

If the facility a patient was referred to is now closed or no longer seeing cancer patients, there may still be a code for the facility in Appendix G that you may fill in here.

EOD -- Tumor Size

NAACCR Version 9.1 Item 780, columns 390-392

The MCR has adopted the SEER Extent of Disease rules for coding Tumor Size, with the following exceptions:

- For Hodgkin and non-Hodgkin lymphomas (9590-9699, 9702-9719) and Kaposi sarcoma (9140), SEER uses this field to record a patient's HIV or AIDS status; do NOT record this for the MCR. Record **999** for lymphomas and the actual Tumor Size for Kaposi sarcoma.
- For mycosis fungoides (9700) and Sezary disease (9701) of the penis (except body of penis, C60.2), scrotum, skin and vulva (C60.0, C60.1, C60.8, C60.9, C63.2, C44._, C51._), SEER uses this field to record peripheral blood involvement; do NOT record this for the MCR. Code **999** for these diseases.
- For any Tumor Size < 2 millimeters, SEER uses code **002** because code **001** is reserved by SEER to indicate only a microscopic focus of invasion. The COC uses **001** for microscopic foci, and also for an actual Tumor Size of (or rounded to) 1 mm. The MCR uses the COC rule.

For All Cases Except Malignant Melanoma of the Skin, Conjunctiva, Penis, Scrotum, or Vulva (C44._, C69.0, C60.0, C60.1, C60.8, C60.9, C63.2, C51._, 8720-8790)

Use three digits to record the size of the primary tumor *in millimeters*. This is the largest dimension or the diameter of the primary tumor before treatment with radiation, chemotherapy, hormone therapy or immunotherapy.

Enter the size given in the pathology report for surgically excised tumors, unless the patient received treatment (radiation, chemotherapy, hormone therapy, immunotherapy) before the surgery. If neoadjuvant therapy occurred, use pre-treatment clinical Tumor Size information rather than the surgical results. Do not calculate a tumor size by adding the sizes of pieces or chips of tissue as they might not be from the same location or might represent only a small portion of a large tumor. Do not add measurements recorded in biopsy and resection reports. Use the report that documents the largest size. If an excisional biopsy is performed and residual tumor is found during a wider resection, base Tumor Size on the excisional biopsy report alone *unless* the residual tumor is found to be larger than the portion that was excised.

There are times when a pathologic Tumor Size is not available and clinical information must be used. The pathology report may not identify Tumor Size, or the tumor may not have been surgically excised. In these cases, use the Tumor Size documented in the following reports (listed in order of preference): 1. Operative reports; 2. Scans; 3. X-rays; 4. Physical exams.

To convert centimeters to millimeters, move the decimal point one digit to the right (i.e., multiply the number of centimeters by 10).

Example: 2.1 centimeters is equivalent to 21 millimeters, so **021** would be entered for Tumor Size.

The following are millimeter equivalents of centimeters and inches:

1.0 mm	=	0.1 cm
10.0 mm	=	1.0 cm
1.0 cm	≈	0.394 inch
1.0 inch	≈	2.5 cm
1.0 inch	≈	25.0 mm

Round off to the nearest millimeter.

Example: Tumor size 2.19 cm. This is 21.9 mm, so round to the nearest millimeter and enter **022**.

Code the largest size when a tumor has multiple measurements.

Examples:

- Record size as **033** mm for a 2 x 3.3 x 2.5 cm tumor.
- Record size as **045** mm for a 4.5 x 2.0 cm tumor.

Do not use the size of the entire *specimen* for Tumor Size.

Examples:

- A patient has an excisional breast biopsy. The pathology report states that the specimen measures 1 cm x 2 cm, but does not state the actual size of the tumor. Do not use the specimen size of 1 cm x 2 cm; rather, code the size based on information from the operative report, mammography, or physical exam.
- A patient has a colonoscopy with polypectomy. The pathology report reads "a 1.5 x .6 cm polyp with a microscopic focus of adenocarcinoma *in situ.*" Enter **001** for Tumor Size because of the term “microscopic” (see **Table IV.2**, pages 102-103).

When a patient has multiple tumors being reported as one primary, record the size of the largest tumor.

Example: A patient has a 1 cm nodule in the right upper lobe and a 1.5 cm nodule with the same histology in the right middle lobe. Enter Tumor Size as **015** mm.

When a primary tumor has both *in situ* and invasive components, record the size of the invasive component only. When a primary tumor is completely *in situ* (has no invasive component), record the entire Tumor Size.

Examples: The pathology report describes a breast mass consisting of a 1.8 x 1.3 cm intraductal carcinoma, and a 1.1 cm nodule of infiltrating duct carcinoma. Enter Tumor Size as **011** mm.

The only information available is that a 3-cm breast tumor had both non-invasive and invasive components. The size of the invasive component alone is unknown, so record **999**.

The pathology report describes a breast mass consisting of a 1.8 x 1.3 cm intraductal carcinoma. Enter Tumor Size as **018** mm.

Descriptive Terms

Physicians sometimes use various terms to describe the size of a tumor instead of giving an actual measurement, especially in clinical descriptions. The following table converts such terms into millimeters.

Table IV.2

Millimeter Equivalents of Descriptive Terms

Fruit:

Object	mm	Object	mm
Apple	**070**	Lemon	**080**
Apricot	**040**	Olive	**020**
Cherry	**020**	Orange	**090**
Date	**040**	Peach	**060**
Fig, dried	**040**	Pear	**090**
Grape	**020**	Plum	**030**
Grapefruit	**100**	Tangerine	**060**
Kumquat	**050**		

Nuts:

Object	mm
Almond	**030**
Chestnut	**040**
Chestnut, horse	**040**
Hazel nut	**020**
Hickory nut	**030**
Peanut	**010**
Pecan	**030**
Walnut	**030**

Vegetables:

Object	mm
Bean	**010**
Lima bean	**020**
Pea	**009**
Pea, split	**009**

Table IV.2 continued

Eggs and Miscellaneous Foods:

Object	mm	Object	mm
Doughnut	**090**	Egg, Pigeon	**030**
Egg	**050**	Egg, Robin	**020**
Egg, bantam	**040**	Lentil	**009**
Egg, goose	**070**	Millet	**009**
Egg, hen	**030**		

Money:

Object	mm
Dime	**010**
Dollar, silver	**040**
Half dollar	**030**
Nickel	**020**
Penny	**010**
Quarter	**020**
Silver Dollar	**040**

Other:

Object	mm
Ball, golf	**040**
Ball, ping-pong	**030**
Ball, tennis	**060**
Baseball	**070**
Eraser, pencil	**009**
Fist	**090**
Marble	**010**
Match head	**009**
Microscopic	**001**
Pencil eraser	**009**

Enter code **000** when the primary location of a solid tumor is not found (AJCC T0). Use this code only for solid tumors.

Example: A patient has a biopsy of an axillary mass. The pathology report identifies infiltrating duct carcinoma in an axillary node. Workup reveals no breast lesion. Enter Tumor Size **000**.

Exception: Enter code **997** for cases of Paget disease of the nipple when no underlying breast tumor can be found.

Use code **009** if an inexact measurement of "less than 1 cm" is given.

Use code **019** if an inexact measurement of "less than 2 cm" is given.

If only an inexact estimate involving a size range is available, code the larger size mentioned. For example, if "3 to 4 cm" is the best information you have, code **040**.

Enter code **998** for Tumor Size when the following terms describe the tumor involvement at these sites:

- Esophagus (C15._): "entire circumference"
- Stomach (C16._): "diffuse"; "widespread"; "3/4 or more"; "linitis plastica"
- Colon/rectosigmoid junction/rectum (C18.0-C20.9): familial/multiple polyposis (Histologic Type Code 8220 or 8221 with a Behavior Code of 2 or 3)
- Lung (C34._): "diffuse"; "entire lobe of lung"
- Breast (C50._): "diffuse"; "widespread"; "3/4 or more"; "inflammatory carcinoma"

Enter code **999** in the following circumstances:

- when Tumor Size is not recorded or not available
- when the pathologic report gives no Tumor Size and there is no clinical Tumor Size information (for example, the primary tumor was not palpable on physical examination and could be not seen by imaging techniques)
- when transurethral resections of the prostate or bladder have produced chips and fragments of tissue (Do not estimate Tumor Size by adding the sizes of these chips or fragments together.) If a clinical Tumor Size can be found (perhaps from physical exam, ultrasound or cystoscopy), then record that Size.
- for the following sites/diseases --
    - Hodgkin lymphoma (9650-9667)
    - ill-defined primary site (C76._)
    - Kaposi sarcoma (9140)
    - Letterer-Siwe disease (9754)
    - leukemia (9800-9948)
    - multiple myeloma (9732)
    - mycosis fungoides of skin (9700, C44._)
    - non-Hodgkin lymphoma (9670-9729)
    - reticuloendotheliosis (9940)
    - Sezary disease (9701)
    - unknown primary site (C80.9)
    - other hematologic neoplasms not listed above

For Malignant Melanoma of the Skin, Conjunctiva, Penis (except C60.2 Body of penis), Scrotum, or Vulva ONLY

(Primary Sites C44._, C51._, C60.0, C60.1, C60.8, C60.9, C63.2, C69.0 with Histologic Type Codes 8720-8790 and Behavior Code 3)

For cases diagnosed in 2002 and thereafter, the COC will adopt the SEER Extent of Disease coding rules for these cases. The MCR is adopting them effective immediately; for pre-2002 diagnoses, you may code Tumor Size using *either* the COC or SEER rules when reporting these cases to the MCR, although we would prefer the SEER rules if possible.

For malignant melanoma of the primary sites listed above, do not record the size of the primary tumor in this field. Record the thickness of the primary tumor or its depth of invasion (Breslow measurement) before tumor-reducing treatment. Do not record this in millimeters -- use hundredths of millimeters instead (round to the nearest hundredth of a mm). Codes follow.

Tumor Thickness / Depth of Invasion	Code
no primary tumor found	**000**
up to 0.01 mm; 0.01 mm	**001**
. . .	. . .
0.10 mm (0.01 cm)	**010**
. . .	. . .
1.00 mm (0.1 cm)	**100**
. . .	. . .
2.00 mm (0.2 cm)	**200**
. . .	. . .
9.90 mm or more	**990**
unknown; not stated	**999**

Diagnostic Confirmation

NAACCR Version 9.1 Item 490, column 242

The Diagnostic Confirmation method indicates whether malignancy was confirmed microscopically at any time during the course of the patient's disease. It is a priority coding scheme, with the lower code number taking priority over other codes. The most conclusive method -- the microscopic examination of tissue -- is therefore coded **1**. Consider the patient's entire disease course when coding this field. Change the code to a lower number if a preferable method later confirms a diagnosis.

The codes for this field follow:

Microscopic Confirmation

1 Positive histology

Microscopic confirmation includes tissue specimens from biopsy (including punch biopsy and needle biopsy), frozen section, surgery, autopsy, curettage and conization. This applies to tumor tissue taken from the primary site or a metastatic site. In addition, it also applies to bone marrow biopsy and bone marrow aspiration results. Hematologic confirmation of leukemia (i.e., peripheral blood smear) should also be coded **1**.

2 Positive exfoliative cytology, no positive histology

Diagnosis by cytology is based upon the microscopic examination of cells, rather than tissue. Code **2** should not be used if cancer is ruled out by histologic findings. Included are fine needle aspirations (FNA), sputum smears, bronchial brushings/washings, tracheal washings, prostatic secretions, breast secretions, gastric fluid, spinal fluid, peritoneal fluid, pleural fluid, urinary sediment, and cervical and vaginal smears. Also include paraffin-block specimens from concentrated spinal, pleural or peritoneal fluid.

4 Positive microscopic confirmation, method not specified

These are cases that are reported as microscopically confirmed, but have no information about the method (histology or cytology).

No Microscopic Confirmation

5 Positive laboratory test or marker study

This includes diagnoses of cancer based on certain laboratory tests or marker studies that are clinically diagnostic for cancer. Examples are an abnormal electrophoretic spike for multiple myeloma or Waldenstrom macroglobulinemia. Note that a PSA test is *not* clinically diagnostic for prostate cancer.

6 Direct visualization without microscopic confirmation

This includes diagnoses of cancer by direct visualization and/or palpitation during surgical exploration, or by endoscopy or *gross* autopsy. Use this code only in the absence of positive histology or cytology.

7 Radiography or other imaging technique without microscopic confirmation

This includes all cases diagnosed by radiology including ultrasound, computerized (axial) tomography (CT or CAT scans), and magnetic resonance imaging (MRI). Use this code only in the absence of positive histology or cytology.

8 Clinical diagnosis only (other than **5**, **6** or **7**)

This includes cases diagnosed by clinical methods not mentioned previously. Use this code only in the absence of positive histology or cytology.

9 Unknown whether or not microscopically confirmed

Use this code when the method of confirmation is unknown. (includes death certificate only cases)

Type of Reporting Source

NAACCR Version 9.1 Item 500, column 243

This code designates the source of information for the patient's cancer (i.e., the source of the documents or other information used to abstract the case).

The codes are as follows:

Information Source	**Code**
hospital information - inpatient/outpatient, or clinic information; includes outpatient services of HMOs and large multi-specialty physician group practices where, at a minimum, the reports from multiple physicians and laboratories are filed in a single medical record for the patient	**1**
laboratory only - hospital or private (e.g., information from a pathology specimen report only)	**3**
private medical practitioner (physician office information); patient diagnosed in physician office and never an inpatient/outpatient at a hospital/clinic	**4**
nursing home, convalescent hospital, hospice information	**5**
autopsy report only (neoplasm discovered and diagnosed for the first time as the result of an autopsy)	**6**
death certificate only	**7**

Coding is hierarchical. If there are multiple sources of information, choose from the codes in this order: **1**, **4**, **5**, **3**, **6**.

Note that code 7 is not used by hospitals.

AJCC TNM Staging System

Both the clinical and pathologic staging fields are collected by the MCR. None of the fields may be left empty. If you have enough information to specifically stage a case clinically and pathologically, then both stages should be reported.

For simultaneous independent bilateral tumors in paired organs, each primary should be staged separately.

Example: A patient is diagnosed in May with a 1-cm duct carcinoma of the right breast and a 0.5-cm lobular carcinoma of the left breast. Stage each primary separately (T1b for the right, T1a for the left).

If the primary site is not *definitely* known, AJCC staging of the cancer should be based on "reasonable clinical certainty" of a primary site identification. If there is *not* "reasonable clinical certainty" indicating one primary site, then the AJCC staging should be "not applicable" (as for an unknown primary site).

Examples:

- A CT scan finds brain metastases. The physician states in the medical record that the primary site is probably lung. Use the AJCC scheme for lung primaries to stage this case.
- A patient has liver metastases, and it is indicated that the primary site may be colon or lung. Since a primary site is not clearly identified, this case should be AJCC-staged T88N88M88.

Lymph nodes are not often surgically removed for *in situ* tumors. The AJCC classification is therefore usually "pTis cN0 cM0, cStage Group 0" because there is usually only clinical evaluation of nodal and distant disease (see "Clarification #3B" in the AJCC's *Cancer Staging Manual, Fifth Edition* Clarifications).

The Clinical AJCC classification (cTNM) is based on information and evidence obtained before treatment. It is especially important for sites which are accessible for clinical examination, including the cervix, oral cavity, and larynx. Use this classification for organs where only clinical findings are used or available to evaluate the extent of disease. Physical examination, imaging, endoscopy, biopsy, surgical exploration and other relevant findings are the basis of clinical staging. Evaluate the clinical stage of disease using all information available before the first cancer-directed treatment.

The Pathologic AJCC classification (pTNM) is based on information obtained before treatment and supplemented by additional evidence from surgery and pathologic examination of resected specimens. It is a combination of all findings through the most definitive surgery (for example, metastases only found after definitive surgery are not included in the AJCC staging). The pathologic stage provides the best data to estimate prognosis and calculate results. Pathologic assessment of the primary tumor requires a resection or biopsy adequate to evaluate the highest pT category. Pathologic regional lymph node assessment requires the surgical removal of enough nodes to confirm the absence of regional lymph node metastasis and evaluate the highest pN category. There is no minimum number of nodes that must be examined -- even one may be sufficient for some cases.

Pathologic staging takes precedence over clinical staging, except as follows:

There are some cases in which clinical staging takes precedence -- when a patient has treatment pre-operatively that may have affected the extent of disease, or when a patient has no cancer-directed surgery.

Examples: breast cancer treated pre-operatively with chemotherapy and radiation
small cell carcinoma of the lung biopsied and treated with chemotherapy
a pancreas primary diagnosed without histologic confirmation

The MCR collects 2 characters in each TNM field. The MCR **does not collect** various supplementary prefixes, suffixes and staging extensions used in the AJCC system:

aTNM when the stage is determined from autopsy findings (the MCR collects only previously unsuspected cases found incidentally through autopsy);

LX, L0 and L1 for lymphatic invasion;

T(d) to indicate diffuse retinoblastoma;

T(f) to indicate family history of retinoblastoma;

T(m) or T(#) to indicate multiple tumors or the specific number of tumors in one site;

rTNM when recurrences are staged after a disease-free interval (we do not collect recurrences);

RX, R0, R1 and R2 for residual tumors following treatment;

SX, S0, S1 and S2 for scleral invasion in opthalmic melanomas;

VX, V0, V1 and V2 for venous invasion;

yTNM when staging is done during/after initial multimodality therapy.

If these prefixes, suffixes or extensions are recorded at your facility, please include the information in one of the Staging Narratives. For example, if you recorded a yTNM stage after chemotherapy to reduce tumor size, the MCR will not realize that the TNM stage we are seeing was affected by treatment -- unless you tell us so in a narrative field.

Clinical T

NAACCR Version 9.1 field "TNM Clin T", Item 940, columns 432-433

Under the TNM system, the T Element is used to describe the primary tumor's size and/or extension. Always refer to the AJCC *Cancer Staging Manual, Fifth Edition* for detailed site-specific/histology-specific coding rules.

The clinical T classification (cT) is based on information and evidence obtained before treatment. It is especially important for sites that are accessible for clinical examination, including cervix, oral cavity, and larynx. Use clinical classifications where only clinical findings are used or available to evaluate the extent of disease. The physical examination, imaging, endoscopy, incisional biopsy, surgical exploration, and other relevant findings are the basis of clinical staging. Evaluate the clinical stage of disease using all information available before the first cancer-directed treatment.

When there are multiple synchronous tumors being reported as one primary, the T Element for the *largest* individual tumor is coded. The MCR does not collect the special AJCC designations for such multiple tumors [e.g., T2(m)], nor the number of such tumors [e.g., T2(3)] in the T Element (and the "EOD -- Tumor Size" field will also only reflect the size of the largest tumor). You may include tumor multiplicity information in the Staging Narratives or "Narrative Primary Site" fields. The number of tumors is important in determining the T Element for some cancer types (for example, see the AJCC coding for liver and intrahepatic bile duct carcinomas).

Examples:

- There are two simultaneous duct carcinomas in the upper outer quadrant of the right breast -- one with diameter 0.4 cm, the other with diameter 0.8 cm. The case is reported with T**1B** because this corresponds to the size of the larger lesion. The Staging Narratives should include the fact that there were two tumors, along with their sizes.
- There are two primary tumors -- one sized at 1.1 cm, the other at 2.1 cm -- in the same lobe of the liver, without any vascular invasion. The T Element is T**3_**. Since this could also describe a single tumor > 2 cm or several smaller tumors with vascular invasion, use a Staging Narrative to specify the situation that was coded.

The following general definitions are used throughout the T Element classification:

TX - primary tumor cannot be assessed or is unknown

T0 - no evidence of a primary tumor

Tis - carcinoma *in situ* (a pathologic T category)

T1, T2, T3, T4 - describe increasing size and/or local extent of the primary tumor

Use **X_** when the site or histologic type has an AJCC staging scheme but there is not enough information to assign a T value.

Example: A patient has a fine needle biopsy of a breast mass. The cytology identifies infiltrating duct carcinoma. The patient is lost to follow-up. AJCC requires the pathologic examination of tissue and the palpation of axillary lymph nodes for clinical staging. Record cT**X_**NX_MX_.

T**X_** is also coded for certain lung cancers (occult) when a primary tumor mass cannot be found or evaluated.

Code T**88** is not included in AJCC staging. The addition of this code enables registries to distinguish unstaged cases in which the site or histologic type has no AJCC staging scheme from cases that could not be staged because the information was incomplete. Use T**88** when the site or histologic type does not have an AJCC staging scheme (or does not have a scheme for classifying the T Element).

Examples:

- Leukemia, trachea, brain primary -- There are no staging schemes in the AJCC *Cancer Staging Manual, Fifth Edition* for these cancers. Record T**88**N88M88.
- The pathology report identifies a breast mass as sarcoma. The breast staging scheme in the AJCC *Cancer Staging Manual, Fifth Edition* applies only to carcinomas. Record T**88**N88M88.
- Lymphomas have AJCC Stage Grouping schemes, but not TNM Elements. Record T**88**N88M88.

Some T categories are only defined for certain types of cancer. Some of these are noted here for convenience, but always refer to the AJCC staging manual for details:

Ta (code **A_**) is defined for penis, renal pelvis and ureter, bladder, and urethra;

Tis pu (code **SU**) is defined for urethra;

Tis pd (code **SD**) is defined for urethra;

T1a1 and T1a2 (codes **A1** and **A2**) are defined for cervix uteri;

T1b1 and T1b2 (codes **B1** and **B2**) are defined for cervix uteri;

T1c is defined for breast, corpus uteri, ovary, fallopian tube, and prostate;

T2c is defined for ovary and fallopian tube;

T3c is defined for ovary, fallopian tube, and kidney;

T4a and T4b are defined for bladder, lacrimal gland, and breast;

T4c and T4d are defined for breast.

Choose the lower (less advanced) T category when there is uncertainty in which category to assign. For example, in the larynx squamous cell carcinoma scheme, the T4 categories specify that the tumor invades *through* the thyroid cartilage, while the T3 categories make no mention of thyroid cartilage involvement; so if a laryngeal tumor invades *into* but not *through* thyroid cartilage, it would be classified T3 because it does not meet the T4 requirements.

The MCR collects 2 characters in this field. If the value is only one character, enter it on the left and leave the second space blank. The following table shows how each T category should be coded (both cT and pT categories are included in this table).

T Category	Code	T Category	Code	T Category	Code	T Category	Code
TX*	**X_**	T1mic	**1M**	T2	**2_**	T4	**4_**
T0	**0_**	T1	**1_**	T2a	**2A**	T4a	**4A**
Ta	**A_**	T1a	**1A**	T2b	**2B**	T4b	**4B**
Tis	**IS**	T1a1	**A1**	T2c	**2C**	T4c	**4C**
Tispu	**SU**	T1a2	**A2**	T3	**3_**	T4d	**4D**
Tispd	**SD**	T1b	**1B**	T3a	**3A**	T not applicable**	**88**
		T1b1	**B1**	T3b	**3B**		
		T1b2	**B2**	T3c	**3C**		
		T1c	**1C**				

* This cancer has a Fifth Edition AJCC T classification scheme, but there is not enough information to specify the T; occult lung cancers (primary tumor not present or not evaluable).

** There is no Fifth Edition AJCC T classification for this cancer.

Clinical N

NAACCR Version 9.1 field "TNM Clin N", Item 950, columns 434-435

The N Element identifies the absence or presence of regional lymph node metastases. Always refer to the AJCC *Cancer Staging Manual, Fifth Edition* for appropriate site-specific and histology-specific coding rules.

The following general definitions are used throughout the TNM classification:

NX - regional lymph nodes cannot be assessed or status unknown

N0 - nodes were assessed and there was no evidence of regional lymph node metastasis

N1, N2, N3 - indicate increasing involvement of regional lymph nodes

Classify a primary tumor that directly extends into lymph nodes in the N Element as lymph node metastasis (rather than in the T Element as continuous extension of the primary tumor).

Metastasis in any lymph node not specified as regional in the appropriate AJCC staging scheme should be considered *distant* and classified in the M Element.

A grossly recognizable tumor nodule in the connective tissue of a lymph drainage area that is *more than 3 millimeters* in greatest dimension is classified in the N Element, even if there is no evidence of residual lymph node tissue found in the nodule. (These nodules are coded in the N Element not because they are thought to be lymph nodes, but because patients with this regional disease spread have prognoses similar to those with regional lymph node involvement.)

Use code N**X**_ when the site or histologic type has an AJCC staging scheme but there is not enough information to assign an N Element code.

Example: A testicular mass is biopsied. The biopsy identifies an embryonal carcinoma. The patient is lost to follow-up. The requirements for clinical N staging of testicular cancers have not been met. Code cN**X**_.

Code N**88** is not included in AJCC staging, but this code helps distinguish unstaged cases with no AJCC staging scheme from cases with a staging scheme that could not be staged. Use N**88** when the site/histologic type does not have an AJCC N staging scheme.

Examples:

- Leukemia, pituitary gland, ill-defined digestive primary site -- These do not have staging schemes in the AJCC *Cancer Staging Manual, Fifth Edition*. Record T88N**88**M88.
- The pathology report identifies a gastric sarcoma. The stomach staging scheme in the AJCC *Cancer Staging Manual, Fifth Edition* applies only to carcinomas. Record T88N**88**M88.
- Gestational trophoblastic tumors do not have N categories. Record N**88**.

Some N categories are only defined for certain types of cancer. Some of these are noted here for convenience, but always refer to the AJCC staging manual for details:

N1a and N1b are defined for thyroid;

N3a and N3b are defined for nasopharynx.

Choose the lower (less advanced) N category when there is any uncertainty. The MCR collects 2 characters in this field. If there is only one character, enter it on the left and leave the second space blank.

N Category	Code	N Category	Code
NX*	**X_**	N2	**2_**
N0	**0_**	N2a	**2A**
N1	**1_**	N2b	**2B**
N1a	**1A**	N2c	**2C**
N1b	**1B**	N3	**3_**
		N3a	**3A**
		N3b	**3B**
		N not applicable**	**88**

* This cancer has a Fifth Edition AJCC N classification scheme, but there is not enough information to specify the N.

** There is no Fifth Edition AJCC N classification for this cancer.

Clinical M

NAACCR Version 9.1 field "TNM Clin M", Item 960, columns 436-437

The M Element records the presence or absence of distant metastases (including spread to non-regional lymph nodes). Always refer to the AJCC *Cancer Staging Manual, Fifth Edition* for appropriate site-specific and histology-specific coding rules.

Metastasis in any lymph node not specified as regional in the appropriate AJCC staging scheme should be considered *distant* and classified in the M Element.

The following general definitions are used throughout the TNM classification:

MX - presence of distant metastasis cannot be assessed or is unknown

M0 - no known distant metastasis

M1 - distant metastasis present

Use M**X_** when the site or histologic type has an AJCC staging scheme but there is not enough information to code an M Element.

Example: A patient has a fine needle biopsy of a breast mass. The cytology identifies infiltrating duct carcinoma. The patient is lost to follow-up. AJCC requires tumor size and palpation of axillary lymph nodes for clinical staging. Record TX_NX_M**X_**.

Code M**88** is not included in AJCC staging, but its use helps registries distinguish unstaged cases in which the site/histology has no AJCC staging scheme from cases that could not be staged because of incomplete information. Use M**88** when the site or histologic type does not have an AJCC staging scheme.

Examples:

- Leukemia, parathyroid, dermatofibrosarcoma, nasal cavity -- There are no staging schemes in the *AJCC Cancer Staging Manual, Fifth Edition* for these cancers. Record T88N88M**88**.
- The medical record identifies a breast mass as sarcoma. The breast staging scheme in the AJCC *Cancer Staging Manual, Fifth Edition* applies only to carcinomas. Record T88N88M**88**.

Only a few cancers have some special M Element codes. Because there are so few, they are noted here for convenience (but always refer to the AJCC staging manual for details):

for the lower thoracic esophagus:
- M1a indicates metastasis to the celiac nodes
- M1b indicates any other distant metastasis

for the midthoracic esophagus:
- M1b indicates involvement of non-regional nodes and/or any other distant metastasis

for the upper thoracic esophagus:
- M1a indicates metastasis to the cervical nodes
- M1b indicates any other distant metastasis

for melanomas of the skin (including skin of vulva, penis and scrotum):
- M1a indicates metastasis to other skin sites, subcutaneous tissue or nonregional nodes
- M1b indicates metastasis to the viscera

for gestational trophoblastic tumors:
- there is no MX_ or M1_ category
- M0_ indicates no *clinical* metastases present
- M1a indicates lung metastasis
- M1b indicates any other distant metastasis

for prostate cancers:
- M1a indicates metastasis to nonregional nodes
- M1b indicates metastasis to bone(s)
- M1c indicates any other distant metastasis

for testicular cancers:
- M1a indicates metastasis to nonregional nodes or lung(s)
- M1b indicates any other distant metastasis

The MCR collects 2 characters in this field. The MCR **does *not* collect** the additional AJCC M1 notations "PUL", "OSS", "HEP", etc. (see page 7 in the *Cancer Staging Manual, Fifth Edition*) to denote the site(s) of distant metastasis. Please include any known site(s) of distant metastasis in a Staging Narrative field.

Choose the lower (less advanced) M category when there is any uncertainty in which category to assign.

M Category	Code
MX*	**X_**
M0	**0_**
M1	**1_**
M1a	**1A**
M1b	**1B**
M1c	**1C**
M not applicable**	**88**

* This cancer has a Fifth Edition AJCC M classification scheme, but there is not enough information to specify the M Element.

** There is no Fifth Edition AJCC M classification for this cancer.

Clinical Stage Grouping

NAACCR Version 9.1 field "TNM Clin Stage Group", Item 970, columns 438-439

The Stage Grouping indicates the anatomic extent of disease and groups cases which are expected to have similar prognoses. The Clinical Stage Grouping is important for selecting and evaluating the primary therapy.

The TNM Stage Grouping is usually based on the previously coded TNM Elements. Non-Hodgkin lymphomas and Hodgkin lymphomas have only Stage Groupings in the TNM system (no TNM Elements). Many of the opthalmic cancers have TNM Elements but no Stage Groupings. Tumor Size, histopathologic Grade, Age at Diagnosis, risk factors, or serum tumor marker data are needed to determine the Stage Grouping for some cancer types. (When appropriate, relevant risk factor information can be included in the "Text--Staging" field since the MCR does not collect codes for risk factors.) Always refer to the AJCC *Cancer Staging Manual, Fifth Edition* for appropriate site-specific coding rules.

Code **88** does not appear in AJCC staging. Use code **88** when the site or histologic type does not have an AJCC Stage Grouping scheme.

Examples:

- Leukemia, central nervous system, adrenal gland, unknown primary -- There are no staging schemes in the AJCC *Cancer Staging Manual, Fifth Edition* for these cancers. Record Stage Grouping **88**.
- Carcinoma of the eyelid -- The appropriate staging scheme in the *AJCC Cancer Staging Manual, Fifth Edition* has TNM Elements, but no Stage Groupings. Record Stage Grouping **88**.

Code **99** also does not appear in AJCC staging. Use code **99** when the site or histologic type has an AJCC staging scheme but there is not enough information to assign a Stage Grouping.

Example: A patient has a fine needle biopsy of a breast mass. The cytology identifies infiltrating duct carcinoma. The patient is lost to follow-up. The AJCC TNM elements are TX_NX_MX_. Record Stage Grouping **99**.

The MCR collects 2 characters in this field. If the code is only one digit, enter it on the left and leave the second space blank. For Hodgkin lymphomas and non-Hodgkin lymphomas, the MCR does *not* collect the Stage Grouping extensions "E", "S" and "E+S" to indicate extralymphatic involvement, involvement of the spleen, and both; neither does the MCR explicitly collect the number of lymph node regions involved (e.g., "II_3"), nor "A" and "B" to indicate systematic symptoms. Such details should be included in the "Text--Staging" field.

Some Stage Grouping categories are only defined for certain cancers. Some of these are noted here for convenience, but always refer to the AJCC staging manual for details:

occult (code **OC**) is defined for lung;

0a (code **0A**) and 0is (code **0S**) are defined for renal pelvis and ureter, bladder, and urethra;

IA1 and IA2 (codes **A1** and **A2**) are defined for cervix uteri;

IB1 and IB2 (codes **B1** and **B2**) are defined for cervix uteri;

IC (code **1C**) is defined for corpus uteri, ovary, fallopian tube, and gestational trophoblastic tumors;

IS (code **1S**) is defined for testis;

IIC is defined for ovary, fallopian tube, gestational trophoblastic tumors, and testis.

Choose the lower (less advanced) category when there is any uncertainty in which to assign.

Stage Grouping	Code	Stage Grouping	Code	Stage Grouping	Code
Stage Occult	**OC**	Stage IB1	**B1**	Stage IIIA	**3A**
Stage 0	**0_**	Stage IB2	**B2**	Stage IIIB	**3B**
Stage 0A	**0A**	Stage IC	**1C**	Stage IIIC	**3C**
Stage 0is	**0S**	Stage IS	**1S**	Stage IV	**4_**
Stage I	**1_**	Stage II	**2_**	Stage IVA	**4A**
Stage IA	**1A**	Stage IIA	**2A**	Stage IVB	**4B**
Stage IA1	**A1**	Stage IIB	**2B**	Stage IVC	**4C**
Stage IA2	**A2**	Stage IIC	**2C**	Stage Grouping not applicable*	**88**
Stage IB	**1B**	Stage III	**3_**	unknown, stage X**	**99**

* There is no Fifth Edition AJCC Stage Grouping classification for this cancer.

** This cancer has a Fifth Edition AJCC Stage Grouping classification, but there is not enough information to specify the Stage Grouping.

Pathologic T

NAACCR Version 9.1 field "TNM Path T", Item 880, columns 422-423

The Pathologic T Element (pT) describes the primary tumor's size and/or extension. Refer to the AJCC *Cancer Staging Manual, Fifth Ed.* for site-specific/histology-specific coding rules.

Pathologic classification is based on information obtained before treatment and supplemented by additional evidence from surgery and pathologic examination of the resected specimen. It is a combination of all findings through the most definitive surgery done. The pathologic stage provides the most precise data to estimate prognosis and calculate end results. Pathologic assessment of the primary tumor generally requires a resection of the primary tumor or biopsy specimen adequate to evaluate the highest pT category.

When there are multiple synchronous tumors being reported as one primary, the T Element for the *largest* individual tumor is coded. The MCR does not collect the special AJCC designations for such multiple tumors [e.g., T2(m)], nor the number of such tumors [e.g., T2(3)] in the T Element (and the "Tumor Size" field will also only reflect the size of the largest tumor). You may include tumor multiplicity information in the Staging Narratives or "Narrative Primary Site" fields. The number of tumors is important in determining the T Element for some cancer types (for example, see the AJCC coding for liver and intrahepatic bile duct carcinomas).

Examples: There are two simultaneous duct carcinomas in the upper outer quadrant of the right breast -- one with diameter 0.4 cm, the other with diameter 0.8 cm. The case is reported with T**1B** because this corresponds to the size of the larger lesion. A Staging Narrative should include the fact that there were two tumors, along with their sizes.

There are two primary tumors -- one sized 1.1 cm, the other 2.1 cm -- in the same lobe of the liver, without any vascular invasion. The T Element is T**3_**. Since this could also describe a single tumor > 2 cm or several smaller tumors with vascular invasion, use a Staging Narrative to specify the situation that was coded.

A tumor nodule, up to 3 millimeters in greatest dimension, in the connective tissue of a lymph drainage area *without histologic evidence of residual lymph node tissue* is classified in the T Element (as discontinuous extension of the primary tumor) rather than in the N Element.

Many sites in the AJCC staging system specifically include a classification for carcinomas *in situ* as "Tis". If there is an accepted histologic classification for carcinoma *in situ* as determined by a pathologist, you may use "pTis" even if the *Cancer Staging Manual, Fifth Edition* does not include this category for the given primary site.

The following general definitions are used throughout the TNM classification:

TX - primary tumor cannot be assessed or is unknown.

T0 - no evidence of a primary tumor

Tis - carcinoma *in situ**

T1, T2, T3, T4 - describe increasing size* and/or local extent of the primary tumor

* *Note*: For AJCC staging schemes in which a specific tumor size plays an important role in assigning the T Element category (such as breast carcinomas), there is sometimes confusion about how to stage an *in situ* case that has a recorded Tumor Size. All lesions that are completely *in situ* (no invasive component) are assigned pTis regardless of the Tumor Size. A large *in situ* tumor does not have the same prognosis as an invasive cancer with the same tumor size. pT1_, pT2_, etc. are assigned to *invasive* cancers of increasing size and/or extent. For a tumor with both *in situ* and invasive components, only the invasive component's size should be recorded and used for assigning the T Element.

Use code **X_** when the site or histologic type has an AJCC staging scheme but there is not enough information to assign a T value.

Example: A biopsy of a breast mass identifies infiltrating duct carcinoma. The patient is lost to follow-up. The AJCC staging scheme requires excision of the primary tumor with macroscopically clean margins for pathologic staging. Record pT**X_**.

Code T**88** is not included in AJCC staging. This code enables the MCR to distinguish cases in which the site or histologic type has no AJCC staging scheme from cases that could not be staged because the information was incomplete. Use T**88** when the site or histologic type does not have an AJCC staging scheme.

Examples:

- Leukemia, dermatofibrosarcoma, brain primary -- These have no staging schemes in the AJCC *Cancer Staging Manual, Fifth Ed*. Record T**88**N88M88.
- The pathology report identifies a breast mass as sarcoma. The breast staging scheme in the *AJCC Cancer Staging Manual, Fifth Ed*. applies only to carcinomas. Record T**88**N88M88.
- Lymphomas have AJCC Stage Groupings, but no TNM Elements. Record T**88**N88M88.

Some T categories are only defined for certain types of cancer. Some of these are noted here for convenience, but always refer to the AJCC staging manual for details:

Ta (code **A_**) is defined for penis, renal pelvis and ureter, bladder, and urethra;

Tis pu (code **SU**) is defined for urethra;

Tis pd (code **SD**) is defined for urethra;

pT1 mic (code **1M**) is defined for breast;

T1a1 and T1a2 (codes **A1** and **A2**) are defined for cervix uteri;

T1b1 and T1b2 (codes **B1** and **B2**) are defined for cervix uteri;

T1c is defined for breast, corpus uteri, ovary, fallopian tube, and prostate;

T2c is defined for ovary and fallopian tube;

T3c is defined for ovary, fallopian tube, and kidney;

T4a and T4b are defined for melanoma of skin, bladder, lacrimal gland, and breast;

T4c and T4d are defined for breast.

Choose the lower (less advanced) T category when there is any uncertainty in which category to assign. For example, in the larynx squamous cell carcinoma scheme, the T4 categories specify that the tumor invades *through* the thyroid cartilage, while the T3 categories make no mention of thyroid cartilage involvement; so if a laryngeal tumor invades *into* but not *through* thyroid cartilage, it would be classified T3 because it does not meet the T4 requirements.

The MCR collects 2 characters in this field. For only one character, enter it on the left and leave the second space blank. The following table shows the code for each T category.

T Category	Code	T Category	Code	T Category	Code	T Category	Code
TX*	**X_**	T1mic	**1M**	T2	**2_**	T4	**4_**
T0	**0_**	T1	**1_**	T2a	**2A**	T4a	**4A**
Ta	**A_**	T1a	**1A**	T2b	**2B**	T4b	**4B**
Tis	**IS**	T1a1	**A1**	T2c	**2C**	T4c	**4C**
Tispu	**SU**	T1a2	**A2**	T3	**3_**	T4d	**4D**
Tispd	**SD**	T1b	**1B**	T3a	**3A**	T not applicable**	**88**
		T1b1	**B1**	T3b	**3B**		
		T1b2	**B2**	T3c	**3C**		
		T1c	**1C**				

* This cancer has a Fifth Edition AJCC T classification scheme, but there is not enough information to specify the T; occult lung cancers (primary tumor mass not present or not evaluable).

** There is no Fifth Edition AJCC T classification for this cancer.

Pathologic N

NAACCR Version 9.1 field "TNM Path N", Item 890, columns 424-425

Pathologic N (pN) identifies the absence or presence of regional lymph node metastases. Always refer to the AJCC *Cancer Staging Manual, Fifth Edition* for appropriate site-specific and histology-specific coding rules.

The following general definitions are used throughout the TNM classification:

NX - regional lymph nodes cannot be assessed or status unknown

N0 - nodes were assessed and there was no evidence of regional lymph node metastasis

N1, N2, N3 - indicate increasing involvement of regional lymph nodes

If the primary tumor extends directly into a lymph node, classify this in the N Element as a lymph node metastasis (rather than in the T Element).

Metastasis in any lymph node not specified as regional in the appropriate AJCC staging scheme should be considered *distant* metastasis and classified in the M Element.

A grossly recognizable tumor nodule in the connective tissue of a lymph drainage area that is *more than 3 millimeters* in greatest dimension is classified in the N Element, even if there is no evidence of residual lymph node tissue found in the nodule. (These nodules are coded in the N Element not because they are thought to be lymph nodes, but because patients with this regional disease spread have prognoses similar to those with regional lymph node involvement.)

Use code N**X**_ when the site or histologic type has an AJCC staging scheme but there is not enough information to assign an N Element code.

Example: A patient has a biopsy of a testicular mass. The biopsy identifies an embryonal carcinoma. The patient is lost to follow-up. This type of case has an AJCC staging scheme, but no assessment of regional lymph node involvement was made. Record N**X**_.

Code **88** does not appear in AJCC staging. Its use enables registries to distinguish cases unstaged because of insufficient information from those unstaged because they have no AJCC staging scheme. Use code **88** when the site/histology does not have an AJCC staging scheme.

Examples:

- Adrenal gland, unknown primary site -- These have no staging schemes in the *AJCC Cancer Staging Manual, Fifth Edition*. Record T88N**88**M88.
- The pathology report identifies a breast mass as sarcoma. The breast staging scheme in the *AJCC Cancer Staging Manual, Fifth Edition* applies only to carcinomas. Record T88N**88**M88.
- Gestational trophoblastic tumors do not have N categories. Record N**88**.

Some N categories are only defined for certain cancers. Some of these are noted here for convenience, but always refer to the AJCC staging manual for details:

pN1a and pN1b are defined for exocrine pancreas, breast, and thyroid;

pN1bi, pN1bii, pN1biii and pN1biv (code **1B** for all) are defined for breast;

N3a and N3b are defined for nasopharynx.

Choose the lower (less advanced) N category when there is uncertainty. The MCR collects 2 characters. If there is only one character, enter it on the left and leave the second space blank.

N Category	Code	N Category	Code
NX*	**X_**	N2	**2_**
N0	**0_**	N2a	**2A**
N1	**1_**	N2b	**2B**
N1a	**1A**	N2c	**2C**
N1b	**1B**	N3	**3_**
		N3a	**3A**
		N3b	**3B**
		N not applicable**	**88**

* This cancer has a Fifth Edition AJCC N classification scheme, but there is not enough information to specify the N.

** There is no Fifth Edition AJCC N classification for this cancer.

Pathologic M

NAACCR Version 9.1 field "TNM Path M", Item 900, columns 426-427

The M Element describes the presence or absence of distant metastases (including non-regional lymph nodes). Refer to the AJCC *Cancer Staging Manual, Fifth Ed.* for site- and histology-specific coding rules.

Metastasis in any lymph node not specified as regional in the appropriate AJCC staging scheme should be considered *distant* and classified in the M Element.

The following general definitions are used throughout the TNM classification:

MX - presence of distant metastasis cannot be assessed or is unknown

M0 - no known distant metastasis

M1 - distant metastasis present

Use M**X_** when the site or histologic type has an AJCC staging scheme but there is not enough information to specify an M Element.

Example: A patient has a breast mass biopsy, finding infiltrating duct carcinoma. The patient is lost to follow-up. Breast carcinomas have an AJCC staging scheme, but the status of distant metastasis has not been evaluated. Record TX_NX_M**X_**.

Code **88** does not appear in AJCC staging. This code allows registries to distinguish unstaged cases in which the site/histology has no AJCC staging scheme from cases that could not be staged because of incomplete information. Use M**88** when the site or Histologic Type does not have an AJCC Staging scheme.

Examples: Leukemia, central nervous system, an ill-defined pelvic site -- These have no staging schemes in the AJCC *Cancer Staging Manual, Fifth Ed*. Record T88N88M**88**.

Pathology identifies stomach sarcoma. The stomach staging scheme in the AJCC *Cancer Staging Manual, Fifth Ed*. applies only to carcinomas. Record T88N88M**88**.

The MCR collects 2 characters in this field. The MCR **does not collect** the additional AJCC M1 notations "PUL", "OSS", "HEP", etc. (see page 7 in the *Cancer Staging Manual, Fifth Ed*.) to denote the site(s) of distant metastasis. Please include any known site(s) of distant metastasis in a Staging Narrative.

Only a few cancers have some special M Element codes. They are noted here for convenience (but always refer to the AJCC staging manual for details):

for the lower thoracic esophagus: M1a indicates metastasis to the celiac nodes
M1b indicates any other distant metastasis

for the midthoracic esophagus: M1b indicates involvement of nonregional nodes and/or any other distant metastasis

for the upper thoracic esophagus: M1a indicates metastasis to the cervical nodes
M1b indicates any other distant metastasis

for melanomas of the skin (including skin of vulva, penis and scrotum):
M1a indicates metastasis to other skin sites, subcutaneous tissue or nonregional nodes
M1b indicates metastasis to the viscera

for gestational trophoblastic tumors: there are no MX_ and M1_ categories
M0_ indicates no *clinical* metastases present
M1a indicates lung metastasis
M1b indicates any other distant metastasis

for prostate cancers: M1a indicates metastasis to nonregional nodes
M1b indicates metastasis to bone(s)
M1c indicates any other distant metastasis

for testicular cancers: M1a indicates metastasis to nonregional nodes or lung(s)
M1b indicates any other distant metastasis

Choose the lower (less advanced) category when there is any uncertainty in which to assign.

M Category	Code
MX*	**X_**
M0	**0_**
M1	**1_**
M1a	**1A**
M1b	**1B**
M1c	**1C**
M not applicable**	**88**

* This cancer has a Fifth Edition AJCC M classification scheme, but there is not enough information to specify the M.

** There is no Fifth Edition AJCC M classification for this cancer.

Pathologic Stage Grouping

NAACCR Version 9.1 field "TNM Path Stage Group", Item 910, columns 428-429

The Stage Grouping describes the anatomic extent of disease. Different cases which fall into the same Stage Grouping are expected to have similar prognoses. The Pathologic Stage Grouping can be used as a guide for the need of adjuvant therapy, for reporting end results, and estimation of prognosis. In order to assign a Pathologic Stage Grouping, it is not always necessary to have three specific Pathologic TNM Elements. If sufficient tissue has been removed for pathologic examination to evaluate the highest T and N categories, you may use either the cM or pM to assign a Pathologic Stage Grouping.

The TNM Stage Grouping is usually based on the previously coded TNM Elements. Non-Hodgkin lymphomas and Hodgkin lymphomas have *only* Stage Groupings in the TNM system (no TNM Elements). Many of the opthalmic cancers have TNM Elements but no Stage Groupings. Tumor Size, histopathologic Grade, Age at Diagnosis, risk factors, or serum tumor marker data are needed to determine the Stage Grouping for some cancer types. (When relevant, risk factor information should be included in the "Text--Staging" field because the MCR does not collect codes for risk factors.) Always refer to the AJCC *Cancer Staging Manual, Fifth Ed.*. for appropriate site-specific and histology-specific coding rules.

Code **88** does not appear in AJCC staging. Use code **88** when the site or histologic type does not have an AJCC Stage Grouping scheme.

Examples:

- Leukemia, dermatofibrosarcoma, trachea, unknown primary site -- There are no staging schemes in the AJCC *Cancer Staging Manual, Fifth Edition* for these cancers. Record Stage Grouping **88**.
- The pathology report identifies a carcinoma of the eyelid. The appropriate staging scheme in the AJCC *Cancer Staging Manual, Fifth Edition* has TNM Elements, but no Stage Groupings. Record **88** here.

Code **99** also does not appear in AJCC staging. Use **99** when the cancer type has an AJCC staging scheme but there is not enough information to assign a pathologic Stage Grouping.

Example: A patient has a fine needle biopsy of a breast mass, identifying infiltrating duct carcinoma. The patient is lost to follow-up. The TNM Elements are TX_NX_MX_. Record Stage Grouping **99**.

The MCR collects 2 characters in this field. If the stage code is only one character, enter it on the left and leave the second space blank. For Hodgkin lymphomas and non-Hodgkin lymphomas, the MCR does *not* collect the Stage Grouping extensions "E", "S" and "E+S" to indicate extralymphatic involvement, involvement of the spleen, and both; neither does the MCR explicitly collect the number of lymph node regions involved (e.g., "II_3"), nor "A" and "B" to indicate systematic symptoms. Such details should be included in the "Text--Staging" field.

Some Stage Grouping categories are only defined for certain cancers. Some of these are noted here for convenience, but always refer to the AJCC staging manual for details:

occult (code **OC**) is defined for lung;

0a (code **0A**) and 0is (code **0S**) are defined for renal pelvis and ureter, bladder, and urethra;

IA1 and IA2 (codes **A1** and **A2**) are defined for cervix uteri;

IB1 and IB2 (codes **B1** and **B2**) are defined for cervix uteri;

IC (code **1C**) is defined for corpus uteri, ovary, fallopian tube, and gestational trophoblastic tumors;

IS (code **1S**) is defined for testis;

IIC is defined for ovary, fallopian tube, gestational trophoblastic tumors, and testis.

Choose the lower (less advanced) grouping when there is any uncertainty in which to assign.

Stage Grouping	Code	Stage Grouping	Code	Stage Grouping	Code
Stage Occult	**OC**	Stage IB1	**B1**	Stage IIIA	**3A**
Stage 0	**0_**	Stage IB2	**B2**	Stage IIIB	**3B**
Stage 0A	**0A**	Stage IC	**1C**	Stage IIIC	**3C**
Stage 0is	**0S**	Stage IS	**1S**	Stage IV	**4_**
Stage I	**1_**	Stage II	**2_**	Stage IVA	**4A**
Stage IA	**1A**	Stage IIA	**2A**	Stage IVB	**4B**
Stage IA1	**A1**	Stage IIB	**2B**	Stage IVC	**4C**
Stage IA2	**A2**	Stage IIC	**2C**	Stage Grouping not applicable*	**88**
Stage IB	**1B**	Stage III	**3_**	unknown, stage X**	**99**

* There is no Fifth Edition AJCC Stage Grouping classification for this cancer.

** This cancer has a Fifth Edition AJCC Stage Grouping classification, but there is not enough information to specify the Stage Grouping.

TNM Edition Number

NAACCR Version 9.1 Item 1060, column 452

This field identifies the edition of the AJCC *Manual for Staging of Cancer* that was used to stage the case. Staging criteria may differ between editions. This code allows analysis of cases grouped by edition number. You should use the staging manual that is *appropriate* for the *year of diagnosis* of a case, but please code the book *that was actually used to stage the case*, even if it is not the appropriate edition to have used for the given year of diagnosis.

AJCC Staging Edition	**Code**
not stated (case has an AJCC staging scheme, but staging was not done)	**0**
First Edition (for cases diagnosed before 1984)	**1**
Second Edition (for cases diagnosed 1984-1988)	**2**
Third Edition (for cases diagnosed 1989-1992)	**3**
Fourth Edition (for cases diagnosed 1993-1997)	**4**
Fifth Edition (for cases diagnosed 1998-2002)	**5**
not applicable (case does *not* have an AJCC staging scheme in the edition used)	**8**
unknown edition (case was AJCC-staged, but the edition used is unspecified)	**9**

If the year of diagnosis is unknown to you, stage the case as if it had been diagnosed in your facility's Date of First Contact year (Year First Seen for This Primary).

SEER Summary Stage 1977

NAACCR Version 9.1 Item 760, column 388

Refer to the Third Edition of this manual for coding diagnoses made before 2001.

SEER Summary Stage 2000 — NAACCR Version 9.1 Item 759, column 387

SEER Summary Staging groups cases into broad categories (such as localized, regional and distant). Note: The COC only requires Summary Staging for cases which are not TNM-staged. The MCR requires *both* Summary Staging and TNM staging for all reportable cases (use "unknown" and "not applicable" codes as necessary).

All cases diagnosed in 2001 and thereafter must be staged using the red *SEER Summary Staging Manual 2000* (published 2001). All pre-2001 diagnoses must be staged using the green *Summary Staging Guide* (1977) [equivalent to the *SEER Self Instructional Manual for Tumor Registrars - Book 6*]. The two books have different staging schemes and rules -- be sure to use the correct book to stage each case based on its diagnosis year. If your data system shows both fields "SEER Summary Stage 1977" and "SEER Summary Stage 2000" on-screen, be sure that the correct field gets filled in based on each case's diagnosis year; if your system shows only one Summary Stage field, be sure to use the correct book to stage each case based on its diagnosis year; when the case is exported, your system will put that single field into the appropriate place in the NAACCR layout based on each case's diagnosis year.

If the year of diagnosis is unknown to you, stage the case as if it had been diagnosed in your facility's Date of First Contact year (Year First Seen for This Primary).

General Guidelines

Rules governing Summary Staging appear in the *SEER Summary Staging Manual 2000*'s first chapter (pages 2-15). The *entire* set of Guidelines on p. 10 is very important to keep in mind as you apply any specific staging scheme. Some of the Guidelines are paraphrased here:

- Instructions in a specific staging scheme take precedence over the General Guidelines on p. 10.
- Summary staging is based on a combination of clinical, operative and pathologic assessments. Clinical evaluations may include important staging information, such as skin involvement, missing from operative and path reports; but if some part of the clinical assessment is disproved by operative or pathologic findings, use the op/path findings. If information from an operative and path report conflict, priority goes to the pathologic assessment. An autopsy report should be given the same priority as a pathology report.
- When you have AJCC TNM staging recorded but no direct Summary Stage information, assign the Summary Stage 2000 code that is most equivalent to what the TNM staging reflects. If the medical record conflicts with a physician's TNM stage, the information in the record takes precedence; try to consult with the physician to see if s/he has information not available in the record, or if the record was incomplete at the time of the TNM staging.

- Include all information available within the following **timeframe**:
  through completion of first-course-of-treatment* surgeries **or**
  within four months of diagnosis *in the absence of disease progression*,
  whichever is longer.

  This applies to all cancers, including prostate. Do not stage too soon (before all the information you need is in the medical record). You must still report to the MCR in a timely manner, however; so when surgery is delayed for a case, you may need to report the case to us initially with an unknown Summary Stage; then be sure to call us (617-624-5645) when the Summary Staging is complete so that we can update the report.

  * *Note*: This refers to the SEER definition of "first course of treatment" which may include a much longer timeframe than the COC definition *under certain circumstances only*. Applying the COC definition here should not make a difference in most cases (see p. 29 in the NAACCR *Standards for Cancer Registries, Volume II: Data Standards and Data Dictionary, Sixth Ed.*, 2001 for a concise comparison of the COC and SEER definitions of "first course of treatment").

- Exclude any metastasis known to have developed after the diagnosis was established.
- Information obtained after the start of treatment (radiation, chemotherapy, hormone therapy, immunotherapy) may be used unless it falls outside the timeframe described in the "surgery/four-months" Guideline.
- Certain staging schemes are used for certain histologic types regardless of primary site:

  Kaposi Sarcoma of All Sites (page 274);

  Hodgkin and Non-Hodgkin Lymphomas of All Sites, excluding Mycosis Fungoides and Sezary Disease of Skin, Vulva, Penis, Scrotum (page 278);

  Hematopoietic, Reticuloendothelial, Immunoproliferative, and Myeloproliferative Neoplasms (page 280).

  If a case has one of these histologies, ignore the primary site when choosing your staging scheme (e.g., a stomach lymphoma should be staged using the lymphoma scheme, even though the stomach scheme does not specify that it excludes lymphomas.)

  Most schemes apply to all other histologies for the given primary sites, except as noted. See the lists on pages 285-287 of the staging manual.

  Some schemes are limited to certain sites and histologies in combination:

  Melanoma of Skin, Vulva, Penis, Scrotum (page 173) and Conjuctiva (page 252);

  Mycosis Fungoides and Sezary Disease of Skin, Vulva, Penis, Scrotum (page 176);

  Melanoma of Cornea, Retina, Choroid, Ciliary Body, Eyeball, and Overlapping and Other Eye (page 256);

  Retinoblastoma (page 258).

Ambiguous terms may be used in the medical record to describe tumor involvement. The following should be used as a guide when assigning Summary Stage 2000:

Involved: Consider the following terms to be indicative of cancer involvement:

- adherent
- apparent(ly)
- appear(s) to
- comparable with
- compatible with
- consistent with
- contiguous with
- continuous with
- encroaching upon*
- extension to, into, onto or out onto
- features of
- fixation to another structure**
- fixed**
- impending perforation of
- impinging upon
- impose/imposing on
- incipient invasion
- induration***
- infringe(s)/infringing
- into*
- intrude(s)
- invasion to, into, onto or out onto
- matted (indicates involvement for lymph nodes only)
- most likely
- onto*
- overstep(s)
- presumed
- probable
- protruding into (unless encapsulated)
- suspect(ed)
- suspicious
- to*
- up to

* indicates cancer involvement whether found in a clinical, operative or pathologic description

** indicates that the *other* structure or tissue is involved

*** used to describe surrounding fibrous or connective tissue adjacent to the tumor; interpreted as extension of the malignant growth

Not Involved: Consider the following terms to be indicative of cancer non-involvement:

- abuts
- approaching
- approximates
- attached
- cannot be excluded
- cannot be ruled out
- effaces/effacing/effacement
- encases/encasing
- encompass(es)
- entrapped
- equivocal
- extension to without invasion
- extension to without involvement of
- kiss(es)/kissing
- matted (except for lymph nodes)
- possible
- questionable
- reaching out
- rule(s) out
- suggests
- very close to
- worrisome

The special use of some terms in the *Summary Staging Manual 2000* are discussed on page 14 therein. When used in other places, these terms may have different meanings.

"adjacent organ(s)": Anatomic structures with specific physiologic functions other than (or in addition to) support and storage that are located next to the primary site organ.

"adjacent structure(s)": connective tissues large enough to have been given a specific name (for example, brachial artery, broad ligament)

"adjacent tissue(s), NOS": This term may appear in the staging schemes for ill-defined and non-specific sites. The term is used to mean "the unnamed tissue(s) that immediately surround an organ or structure containing a primary cancer". The tumor has invaded past the outer border (capsule, serosa, other edge) of the primary organ into the organ's supportive structures but has *not* invaded larger structures and adjacent organs.

"connective tissue(s)": These do not generally have specific names. They include adipose tissue, aponeuroses, blood vessels, bursa, fascia, fatty tissues, fibrous tissues, ganglia, ligaments, lymphatic channels, muscle, nerves (spinal, sympathetic, peripheral), skeletal muscle, subcutaneous tissue, synovia, tendons, tendon sheaths, unidentified vessels and veins. Blood, cartilage and bone are *not* considered "connective tissues" in the Summary Staging manual.

"cortex", "cortical": the external or outer surface layer of an organ

"marrow", "medulla", "medullary": the interior central portion of an organ

"parenchyma": the functional portion of an organ, as distinguished from its framework or stroma; the place where most malignancies arise

"stroma": the cells and tissues that support, store nutrients, and maintain viability within an organ; consists of connective tissue, vessels and nerves; provides the framework of an organ

***In Situ* (Code 0)**

A diagnosis of "*in situ*" must be based on microscopic examination of tissue or cells. An *in situ* tumor has all the characteristics of malignancy except invasion (i.e., the basement membrane has not been penetrated). A tumor that displays any degree of invasion is not classified as *in situ* (it is at least localized). For example, if a report states "carcinoma *in situ* of the cervix showing microinvasion of one area", then the tumor is not *in situ.* A primary tumor may involve more than one site (e.g., cervix and vagina, labial mucosa and gingiva) and still be *in situ* if it does not show any invasion. If a tumor is Summary Staged as *in situ,* its Behavior Code (see pages 85-88) is **2**. Organs and tissues that have no epithelial layer and basement membrane cannot be Summary Staged as *in situ*; only carcinomas and melanomas may be staged *in situ.* For carcinomas and melanomas, if all reports are negative for disease spread and the pathologist states that the cancer is noninvasive or noninfiltrating, code as **0**.

Certain terms indicate an *in situ* stage:

- confined to epithelium
- intracystic
- intraductal
- intraepidermal
- intraepithelial
- intrasquamous
- involvement up to but not including the basement membrane
- no penetration below the basement membrane

- no stromal invasion
- noninfiltrating
- noninvasive
- preinvasive
- Stage 0

Localized (Code 1)

A localized tumor invades beyond the basement membrane, but is still confined entirely to the organ of origin. For most sites, a localized tumor may be widely invasive or have spread within the organ, as long as it does not extend beyond its outer limits and there is no evidence of metastasis to other parts of the body. If all reports are negative for disease spread and the pathologist states that the cancer is invasive or infiltrating, use code **1**.

Inaccessible Sites - Clinical diagnosis alone may be insufficient for staging a tumor "localized" when the primary site and regional nodes are inaccessible, such as with the esophagus or lung. Without confirmation from surgery/autopsy, it is usually preferable to use code **9** ("unstageable"); but, if a physician stages the case "localized", or if clinical reports (like CT scans) provide enough information to rule out further disease spread, code **1** may be used; if surgery was done, study the operative report for evidence of direct extension or metastasis; if surgery and radiology have produced no such evidence, assign code **1**.

Vessel / Lymphatic Involvement -- Invasion of blood vessels, lymphatics and/or nerves *within* the primary site is localized, unless there is evidence of disease outside the site.

Microinvasive -- This term, used by pathologists to describe the earliest invasive stage, has precise meaning for cancer of certain sites. Microinvasive cancers are staged as "localized".

Regional (Codes 2, 3, 4, 5)

A tumor at the "regional" stage has grown beyond the limits of the organ of origin -- into adjacent organs or tissues by direct extension, and/or to regional lymph nodes by metastasis. Cancer becomes regional when there is the potential for spread by more than one lymphatic or vascular supply route. If *in situ*, localized and distant stage categories have been ruled out, then the stage may be assumed to be regional. Neoplasms appearing to be in the "regional" stage must be evaluated very carefully to make sure they have not spread any further.

Example: A malignant tumor of the stomach or gallbladder often passes through the wall of the primary organ into surrounding tissues. Before coding as regional, make certain that radiological or scan exams do not reveal metastasis to lung or bone and that surgery did not reveal metastases to non-regional tissues. Check progress notes and discharge summary for any mention of metastases.

Regional, by Direct Extension or Contiguous Spread Only (Code **2**) -- Sometimes a cancer spreads to surrounding organs or tissue with no involvement of regional lymph nodes. The cancer invades through the wall of the organ of origin into surrounding organs and/or adjacent tissues. Before assigning code **2** to such a case, make sure that tissue adjacent to the original organ is actually involved. The terms "penetrating", "extension" and "metastases" are sometimes used to describe spreading within an organ, such as the large intestine or bladder, in which case the stage might still be "localized" (code **1**). The *Summary Staging Manual* lists organs and structures considered to be regional for each site.

Regional, to Lymph Nodes Only (Code **3**) -- If a cancer continues to grow after the onset of local invasion, regional lymph nodes draining the area usually become involved. The cancer invades the walls of lymphatics and may travel to and grow in nearby nodes. Enter code **3** if nodal involvement is indicated and there is no other evidence of extension beyond the organ of origin. For carcinomas, if there are lymph nodes involved, then the stage is at least regional. Words like "local" and "metastasis" appearing in medical records sometimes cause confusion in staging. Failure to recognize the names of regional lymph nodes might lead to incorrect staging. The *Summary Staging Manual* and the AJCC's *Cancer Staging Manual* contain helpful information about the names of regional and distant nodes.

Examples: "Carcinoma of the stomach with involvement of *local* lymph nodes" should, lacking further evidence, be considered "regional" and coded **3**.

Statements like "carcinoma of the breast with axillary lymph node *metastasis*" and "carcinoma of the stomach with *metastasis* to perigastric nodes" indicate metastasis to regional nodes and should be assigned code **3**.

Regional nodes are listed for each staging scheme. Consider the farthest specific node chain involved. Any nodes that are removed along with the resected primary site specimen that are not specifically identified should be considered "regional lymph nodes, NOS". If a specific node chain is named but is not listed in the staging scheme, first determine if the recorded name is synonymous with a listed regional chain (see page 284 in the *Summary Staging Manual*); otherwise, assume that these are *distant* lymph nodes (**7**). Unless stated to be contralateral or bilateral, assume that lymph nodes mentioned are ipsilateral (homolateral).

For lymphomas, *any mention* of lymph nodes indicates *involvement*. For solid tumors, the terms "fixed", "matted" and "mass in the mediastinum, retroperitoneum, and/or mesentery" without specific information as to the types of tissue involved are considered to indicate lymph node involvement. The terms "palpable", "enlarged", "visible swelling", "shotty" and "lymphadenopathy" are to be *ignored* except for lung primaries; for lung primaries, these terms *are* interpreted as regional lymph node involvement.

Bilateral lymph node metastases do not necessarily indicate distant spread. For primaries on the body's midline (e.g., esophagus), bilateral node involvement is regional. Check each staging scheme carefully.

Regional, Direct Extension and Lymph Nodes (Code **4**) -- Enter code **4** when a tumor has metastasized to regional lymph nodes *and also* has spread to regional tissue via direct extension, but there is no evidence of metastasis to a distant site or distant lymph nodes.

Regional, NOS (Code **5**) -- If available information states only that a cancer has spread regionally, Summary Stage to code **5**. This indicates that you cannot determine if the spread is to regional nodes only, by direct extension of the tumor only, or both. Some staging schemes have this as the only Regional code available because the "direct extension" and "regional lymph node" categories do not apply (for example, brain cancers and lymphomas).

Distant Site(s) and/or Distant Node(s) Involved (Code 7)

Distant metastases are tumor cells that have broken away from the primary tumor, traveled to other parts of the body, and have begun to grow there. This may be called "diffuse", "disseminated", "metastatic", "remote" or "secondary" disease. In most cases there is no continuous trail of tumor cells between the primary and distant sites. Cancer cells may travel from the primary site and grow distantly by several routes:

by direct tumor extension from the primary organ through adjacent tissues into a non-regional organ;

by travel in lymph channels beyond the first (regional) drainage area to distant nodes;

invasion of blood vessels within the primary site, allowing hematogenous (blood-borne) disease spread to blood vessels in distant sites;

by implantation or seeding through fluid within a body cavity.

Some distant sites and nodes are listed within a staging scheme, but obviously not *all* sites and nodes that are not regional can be listed. *Assume* that any site or node chain not listed as "regional" is distant, even if the site/node is not listed as "distant"; but be careful in case the terminology in the medical record is a *synonym* for one of the regional sites or node chains.

Common sites of distant spread are liver, lung, brain and bones, but these sites are not usually listed as distant in the staging schemes. Do not assume that involvement of these sites is distant spread for every case. For example, if the primary site is adjacent to the liver (like the gallbladder), then the liver may be regionally involved by direct extension of the primary tumor; determining if the *outside* surface of the secondary organ is involved or if the cancer grew discontinuously from *inside* the secondary organ is key.

Hematopoietic, reticuloendothelial, immunoproliferative and myeloproliferative neoplasms are considered distant disease and are coded with **7** except as noted in each staging scheme.

Unstageable; Unknown; Unspecified; Unknown if Extension or Metastasis (Code 9)

If information in the medical record is insufficient to assign a Summary Stage, enter **9**. This code should be applied sparingly. If possible, contact a physician to see if there is information available about the case that is not included in the medical record.

The staging scheme for "Other and Ill-Defined Sites, Unknown Primary Site" (p. 281) includes *only* code **9**. If the primary site is unknown -- even if disease found is presumed metastatic -- the Summary Stage must be **9**.

Use only the codes shown in the *SEER Summary Staging Manual 2000* for a specific staging scheme. The *general* code categories follow:

Extent of Disease	Code
in situ	**0**
localized only	**1**
regional, by direct extension only	**2**
regional, to lymph nodes only	**3**
regional (both **2** and **3**)	**4**
regional, NOS	**5**
distant site(s)/node(s) involved	**7**
unstageable, unknown, or unspecified; unknown if extension or metastasis	**9**

Not all of these codes apply to every staging scheme. For example, in the Brain and Cerebral Meninges scheme (page 266), only codes **1**, **5**, **7** and **9** are applicable.

The Guidelines on page 11 of the *Summary Staging Manual 2000* may be used for efficient Summary Staging. They are not reproduced here.

Pediatric Stage

NAACCR Version 9.1 Item 1120, columns 479-480

The staging scheme for an adult cancer case is not always applicable to the same disease when it develops in a child. Several pediatric intergroup studies and cooperative groups have developed their own staging criteria for pediatric cases. As indicated in the code table (next page), certain stage categories are only defined for certain diagnoses.

Record the Pediatric Stage code as specified in the Pediatric Staging System that was used to stage the case (see next field). This field has 2 characters; if the code is only one character, record it on the left and leave the second space blank. Truncate the least significant subdivision of the category from the right as needed.

Use code **88** for all non-pediatric cases.

Pediatric cases are most often staged by physicians. For your information, Appendix H includes a Pediatric Staging Guide that may provide some reference for what stages of disease are reflected by some of the standard Pediatric Stage codes. (Other physicians and facilities may choose to apply different staging schemes or rules than those in Appendix H.)

Codes for the "Pediatric Stage" field:

Pediatric Stage	Applicable Case Types	Code
Stage I		**1_**
Stage IA	rhabdomyosarcoma and related sarcomas only	**1A**
Stage IB	rhabdomyosarcoma and related sarcomas only	**1B**
Stage II		**2_**
Stage IIA	rhabdomyosarcoma and related sarcomas only	**2A**
Stage IIB	rhabdomyosarcoma and related sarcomas only	**2B**
Stage IIC	rhabdomyosarcoma and related sarcomas only	**2C**
Stage III		**3_**
Stage IIIA	liver, rhabdomyosarcoma and related sarcomas, Wilms tumor only	**3A**
Stage IIIB	liver, rhabdomyosarcoma and related sarcomas, Wilms tumor only	**3B**
Stage IIIC	Wilms tumor only	**3C**
Stage IIID	Wilms tumor only	**3D**
Stage IIIE	Wilms tumor only	**3E**
Stage IV		**4_**
Stage IVA	bone only	**4A**
Stage IVB	bone only	**4B**
Stage IVS	neuroblastoma only	**4S**
Stage V	Wilms tumor, retinoblastoma only	**5_**
Stage A	neuroblastoma only	**A_**
Stage B	neuroblastoma only	**B_**
Stage C	neuroblastoma only	**C_**
Stage D	neuroblastoma only	**D_**
Stage DS	neuroblastoma only	**DS**
not applicable (not a pediatric case; adult patient)		**88**
unstaged; unknown; best code not valid*		**99**

* Not all codes that might be considered valid within the Pediatric Staging Systems on page 141 have valid codes in the table above. If a pediatric case has been staged using a Staging System on page 141 but you cannot assign one of the codes above, enter a **99** in the Pediatric Stage field and code the System used in the Pediatric Staging System field; include an explanation in a Staging Narrative. Example: a child's case is diagnosed in 2001 as "metastatic" under the SEER Summary Staging system; enter **05** for Pediatric Staging System, **99** for Pediatric Stage, and **7** in the regular Summary Stage 2000 field.

Pediatric Staging System

NAACCR Version 9.1 Item 1130, columns 481-482

This field records the specific staging system used to stage a pediatric case so that the stage code recorded can be interpreted.

Use code **88** for all non-pediatric cases. Record **00** when a pediatric case was not staged. Use **97** when the case was staged using a system other than those identified in codes **01-15**. Use code **99** if a pediatric case was staged, but the staging system used is unknown to you.

Staging System	**Code**
none (a pediatric case, but it was not staged)	**00**
American Joint Committee on Cancer (AJCC)	**01**
Ann Arbor	**02**
Children's Cancer Group (CCG)	**03**
Evans	**04**
Summary Stage (1977 or 2000)*	**05**
Intergroup Ewing	**06**
Intergroup Hepatoblastoma	**07**
Intergroup Rhabdomyosarcoma	**08**
International System	**09**
Murphy	**10**
National Cancer Institute (pediatric oncology)	**11**
National Wilms Tumor Study	**12**
Pediatric Oncology Group (POG)	**13**
Reese-Ellsworth	**14**
SEER Extent of Disease	**15**
not applicable (not a pediatric case; adult patient)	**88**
other (a pediatric case staged using a staging system not listed here)	**97**
unknown (a staged pediatric case, but the system used is unknown)	**99**

* If a pediatric case has been assigned a SEER Summary Stage, code this stage in the regular Summary Stage 1977 or Summary Stage 2000 field (based on the year of diagnosis) because not all of the Summary Stage codes (0, 1, 2, 3, 4, 5, 7, 9) are valid for the Pediatric Stage field; and then record **99** in the Pediatric Stage field.

Regional Nodes Examined

NAACCR Version 9.1 Item 830, columns 400-401

This field describes the total number of regional lymph nodes *examined* by a pathologist. Include nodes considered "regional" and used in the pN Element according to the AJCC *Cancer Staging Manual, Fifth Ed*. Code *all* regional lymph nodes removed as part of first course of therapy (see pages 149-150 for the definition of first course of therapy). If nodes were removed at different times during first course of treatment, be sure to include all of them here. Do not include nodes removed to just establish recurrence or disease progression.

Notes: The number coded in this field may not be the same as in "Number of Regional Lymph Nodes Removed -- Summary". "Number of Regional Lymph Nodes Removed -- Summary" refers only to nodes removed during the procedure coded in "Surgery of Primary Site -- Summary"; "Regional Nodes Examined" refers to *all* regional nodes removed during the entire first course of treatment.

Also, a tumor nodule (>3 mm in diameter) removed in adjacent tissue may be counted as a regional node for AJCC staging purposes, even if pathology later found no residual node tissue in that nodule. (See pages 6-7 and appropriate sites in the AJCC *Cancer Staging Manual, 5th Ed*. for these rules.) Such a nodule could be counted as a node in "Regional Nodes Examined" and "Regional Nodes Positive", but would *not* be counted in the "Number of Regional Lymph Nodes Removed" *surgery* fields.

Use code **00** when no regional nodes were removed.

Use code **95** when a lymph node aspiration was performed and the cytology or histology was positive for malignant *cells*, but no *nodes* were actually removed.

Use code **99** if information about regional lymph node removal is completely unknown, and for sites and histologies for which regional lymph node removal is not applicable.

Examples:
brain primary
leukemia
lymphoma
multiple myeloma
unknown primary
patient treated pre-operatively with radiation, chemotherapy, hormone therapy or immunotherapy

The codes for "Regional Nodes Examined" follow:

No regional lymph nodes were removed.	**00**
One regional lymph node was removed.	**01**
Two regional lymph nodes were removed.	**02**
...	**...**
Ninety *or more* regional lymph nodes were removed.	**90**
No regional lymph node(s) removed, but aspiration of regional lymph node(s) was performed.	**95**
Regional lymph node removal documented as a *sampling*, and # of regional nodes unknown/not stated.	**96**
Regional lymph node removal documented as *dissection*, and # of regional nodes unknown/not stated.	**97**
Regional lymph nodes surgically removed, but # of nodes unknown/not stated *and* their removal was not documented as a "sampling" or a "dissection".	**98**
not applicable; not stated; unknown; death certificate only	**99**

Regional Nodes Positive

NAACCR Version 9.1 Item 820, columns 398-399

This field describes the number of regional lymph nodes examined by a pathologist and reported as containing tumor. Include all regional nodes removed during first course of treatment (see pages 149-150 for the definition of first course of treatment). Include nodes considered "regional" and used in the pN Element according to the AJCC *Cancer Staging Manual, Fifth Ed*. Be sure that the number coded in this field (up to **89**) does not exceed the number coded for "Regional Nodes Examined".

Examples: Pathology report reads "11/17 nodes examined contain metastatic squamous cell carcinoma". Enter **11** for "Regional Nodes Positive".

No regional lymph nodes were removed during first course of treatment. "Regional Nodes Examined" is **00**, and "Regional Nodes Positive" is **98**.

Note: A tumor nodule (>3 mm in diameter) removed in adjacent tissue may be counted as an involved regional node for AJCC staging purposes, even if that nodule was not found to contain node tissue. (See pages 6-7 and appropriate sites in the AJCC *Cancer Staging Manual, 5th Ed*. for these rules.) Such a nodule could be counted as an involved regional lymph node in the "Regional Nodes Removed" and "Regional Nodes Positive" fields, but would *not* be counted in the "Number of Regional Lymph Nodes Removed" *surgery* fields.

Use code **97** when the cytology or histology from a lymph node *aspiration* is positive for malignant cells.

Use code **98** when no regional lymph nodes were found positive because none were ever examined.

Use code **99** if information about the regional lymph node status is unknown, or if regional lymph node removal is not applicable for the case.

Examples: brain primary
leukemia
lymphoma
multiple myeloma
unknown primary site
patient treated pre-operatively with radiation, chemotherapy, hormone therapy or immunotherapy

The codes for "Regional Nodes Positive" follow:

All regional nodes examined were negative.	**00**
one positive regional node	**01**
two positive regional nodes	**02**
...	**...**
ninety-six *or more* positive regional nodes	**96**
Positive regional nodes were reported, but the number was not specified.	**97**
No regional nodes were examined.	**98**
Regional nodes were examined, but it's unknown if they were positive or negative; not applicable	**99**

EOD -- Extension

NAACCR Version 9.1 Item 790, columns 393-394

This field is not required for the MCR, but we will collect anything that we find in this field when you submit case records. If you use SEER Extent of Disease coding at your facility, you may fill this field according to the rules in the *SEER Extent of Disease, 1988: Codes and Coding Instructions, Third Ed*. (1998). The field will be read at the MCR, but not edited.

EOD -- Extension Prostate Pathology

NAACCR Version 9.1 field “EOD--Extension Prost Path”, Item 800, columns 395-396

This field is not required for the MCR, but we will collect anything that's in this field when you submit cases. If you use SEER Extent of Disease coding, you may fill this field according to the rules in the *SEER Extent of Disease, 1988: Codes and Coding Instructions, Third Ed*. (1998). The field will be read at the MCR, but not edited.

EOD -- Lymph Node Involvement

NAACCR Version 9.1 field "EOD--Lymph Node Involv", Item 810, column 397

This field is not required for the MCR, but we will collect anything that we find in this field when you submit case records. If you use SEER Extent of Disease coding at your facility, you may fill in this field according to the rules in the *SEER Extent of Disease, 1988: Codes and Coding Instructions, Third Ed*. (1998). The field will be read at the MCR, but we will not edit it.

Staging Narratives

The following seven fields are free text fields that should include information important to understanding and interpreting exactly how the case was diagnosed, evaluated and staged. Use standard abbreviations. Please be concise, but be sure to include relevant *details* such as the exact names of involved nodes and metastatic sites. Dates may be important to understand the order in which information about the case was accumulated. Dividing up the information among the given categories (clinical exams vs. pathologic assessments, for example) helps us interpret how to weigh all of the information reported. The information related to staging determination is most important to us, but please include anything else that *you* think will be important for us to know about the case.

Because all Massachusetts facilities that diagnose and/or treat cancer are required to report to the MCR, we should eventually receive a complete account of all activities related to how each patient was diagnosed, evaluated and treated (through the beginning of first course of therapy). Your own facility is the *best* source of information about what went on *there*; the second-hand reporting of results obtained at other facilities is often less accurate than the information we should receive directly from those facilities. If you are including relevant information obtained from other facilities or physician offices, please indicate which information came from where. In case of conflicting information received from multiple facilities, this helps the MCR determine who actually did what to the patient and when.

Text--Dx Proc--PE

NAACCR Version 9.1 Item 2520, columns 1917-2116

This narrative field records information summarized from patient history and physical examinations. Up to 200 characters are allowed. Please put the information that is most pertinent to staging up front. Please avoid including sensitive patient information (such as history of drug abuse or HIV status) that is irrelevant to the essential functions of the central registry. Leave the field empty if the medical record includes no information relevant to this text category.

Text--Dx Proc--X-Ray/Scan

NAACCR Version 9.1 Item 2530, columns 2117-2366

This narrative field records information summarized from diagnostic imaging reports. Up to 250 characters are allowed.* Please put the information that is most pertinent to staging up front. Leave the field empty if the medical record includes no information relevant to this text category.

* The CIMS Satellite system can only hold 200 characters in this field.

Text--Dx Proc--Scopes

NAACCR Version 9.1 Item 2540, columns 2367-2616

This narrative field records information summarized from endoscopic examinations. Up to 250 characters are allowed.* Please put the information that is most pertinent to staging up front. Leave the field empty if the medical record includes no information relevant to this text category.

* The CIMS Satellite system can only hold 200 characters in this field.

Text--Dx Proc--Lab Tests

NAACCR Version 9.1 Item 2550, columns 2617-2866

This narrative field records information summarized from laboratory results other than cytology or histopathology. Up to 250 characters are allowed.* Please put the information that is most pertinent to staging up front. Leave the field empty if the medical record includes no information relevant to this text category.

* The CIMS Satellite system can only hold 200 characters in this field.

Text--Dx Proc--Op

NAACCR Version 9.1 Item 2560, columns 2867-3116

This narrative field records information summarized from operative reports. Up to 250 characters are allowed.* Please put the information that is most pertinent to staging up front. Leave the field empty if the medical record includes no information relevant to this text category.

* The CIMS Satellite system can only hold 200 characters in this field.

Text--Dx Proc--Path

NAACCR Version 9.1 Item 2570, columns 3117-3366

This narrative field records information summarized from cytology and histopathology reports. Up to 250 characters are allowed.* Please put the information that is most pertinent to staging up front. Leave the field empty if the medical record includes no information relevant to this text category.

* The CIMS Satellite system can only hold 200 characters in this field.

Text--Staging

NAACCR Version 9.1 Item 2600, columns 3447-3746

This narrative field records any information relevant to a case's staging that is not included elsewhere in the data and text fields collected by the MCR*. This might include the number of tumors in the primary site, risk factors not included in the patient history or physical examination, or the fact that staging occurred after treatment (as in a "yTNM" stage). If there is anything relevant to the staging that you could not fit into one of the other narrative categories, include it here (labeled, for example, as "Path Results continued..."). Also include anything relevant which you don't think really belongs in one of the other categories. Up to 300 characters are allowed.** Leave the field empty if it is not applicable to a particular case.

* Appreciate that there are many standard fields that may be on your data system that are **not** collected by the MCR which may include information related to the stage. For example, we do not collect the "sites of distant metastasis" fields, the "TNM stage descriptor" fields, Date of First Positive Biopsy, and "screening/biopsy procedures" for breast and prostate cases.

** The CIMS Satellite system can only hold 200 characters in this field.

SECTION V - TREATMENT DATA

First Course of Treatment - General Instructions

First course of treatment (or therapy) includes all methods of treatment recorded by the managing physician(s) in the treatment plan *and administered before disease progression or recurrence*. This may include the treatment choice "no therapy" (as when a patient refuses treatment, someone refuses for the patient, the patient died before treatment could begin, or a medical recommendation of "no treatment" was made). In general, only code treatments *actually administered* to the patient (the refusal of some types of treatment is also coded). The MCR follows COC rules concerning what constitutes first-course treatment.

Treatment Plan

A treatment plan is a statement made by the managing physician(s), documenting how they intend to modify or control the disease. All cancer-directed treatments specified in the treatment plan that are delivered to the patient are part of the first course of therapy. A treatment plan may specify one treatment method or a combination. A single "regimen" may include a combination of concurrent or adjuvant treatments. A recommendation of “no treatment” or "watchful waiting" is also a treatment plan; if cancer-directed treatment begins *after* a planned period of watchful waiting, then this treatment is *subsequent therapy* and it is not reportable to the MCR.

A treatment plan's documentation may be fragmented and is frequently found in several different sources, including the hospital medical record, clinic record, consultation reports and outpatient records. Some information may only be recorded in a physician's office.

Time Periods for All Malignancies Except Leukemias

First course of therapy includes all cancer-directed treatment planned by the physician(s) during or after the first diagnosis of cancer. Planned treatment may include multiple modes of therapy and may encompass intervals of a year or more.

When a treatment plan has been made but is *not available* to you, evaluate the therapy and the time it started. If the therapy is part of an established protocol, or within accepted management guidelines for the disease, consider it to be first-course therapy.

If there is no treatment plan, established protocol, or management guidelines and you cannot consult with a physician, use the following principle: "Initial treatment must begin within four months of the date of initial diagnosis." All other cancer-directed therapy that begins within four months of the date of initial treatment is first course of therapy.

Treatment failure or disease progression may cause the planned first-course therapy to be stopped mid-course. Any treatments administered *after the discontinuation* of first-course therapy are considered *subsequent therapy* (don’t record it for the MCR).

Time Periods for Leukemias Only

First course of therapy includes all cancer-directed treatments planned by the physician(s) during or after the first diagnosis of this leukemia. Record all remission-inducing or remission-maintaining cancer-directed therapy as first-course (including radiation to the brain/CNS). Treatment regimens may include multiple therapy modes, and their administration may encompass a year or more. For example, first-course protocols for some pediatric leukemias may encompass two years or more; the induction, consolidation and maintenance phases of the treatment are all considered first-course.

When a treatment plan has been made but is *not available* to you, evaluate the therapy and the time it started; if the therapy is part of an established protocol or within accepted management guidelines for the leukemia, it is first-course.

If there is no treatment plan, established protocol, or management guidelines and you cannot consult with a physician, use the principle: "Initial treatment must begin within two months of the date of initial diagnosis." All other cancer-directed therapy that begins within two months of the date of initial treatment is first course of therapy.

A patient may relapse after a first remission. All treatment administered after relapse is subsequent therapy (don't record this for the MCR).

Definitions

"Cancer-Directed Treatment" -- Cancer-directed treatment is tumor-directed and is not limited to the primary site. Its purpose is to **modify, control, remove or destroy primary or metastatic cancer tissue**. It may minimize tumor size or delay disease spread. Some types of palliative care may be considered cancer-directed; for example, radiation to help relieve painful bone metastases is not meant to be curative, but it is cancer-directed in that the palliative effect is achieved by destroying cancer cells proliferating in the bone; *it treats the disease* as well as the patient.

"Non Cancer-Directed Treatment" -- These treatments prolong life, ease pain, or prepare a patient for cancer-directed therapy. They are not directed at tumor; they are not meant to reduce tumor size or delay disease spread. Such treatments include diagnostic procedures, procedures done to evaluate disease stage, and supportive care* (treatments designed to relieve symptoms or minimize the cancer's effects). The MCR only collects information on non cancer-directed *surgery* (in the "Diagnostic, Staging or Palliative Procedures" fields).

* For hematopoietic diseases only, supportive care may be coded as "Other Cancer-Directed Therapy". See p. 179 for details.

TREATMENT DATA ITEMS

Treatment - Summary / Treatment - At This Facility Codes -- Numerical codes are used to describe each treatment modality (surgery, radiation, chemotherapy, etc.). For each modality, there is a field used to code a Summary of the entire first course of treatment, and a field to assign a separate code to that portion of the treatment administered at the reporting hospital.

For the purposes of treatment coding, the office of a physician on the hospital's medical staff should be considered to be an extension of the hospital (i.e., when coding treatment given at the reporting hospital, include treatment administered in the office of a physician on the medical staff if you have information about what procedures were done there).

Treatment - Start Dates -- There is a *start* date field for each modality. Dates should be entered in MMDDCCYY format. If an exact start date is not available, please record an *approximate* date. An estimated date is preferable to an unknown date -- and if you report an approximate date for us, please identify this in the appropriate Narrative field.

Example: You can only estimate that radiation began in early March 2001. Enter **03072001** as an approximate start date for Radiation Therapy, and include in the Radiation Narrative a phrase like "early March start date estimated".

If the treatment was administered in courses (as in a radiation series) or included different procedures (e.g., an excisional biopsy and a resection), enter the date of the first procedure.

For any type of treatment that is *not known to have been given*, fill the date field with zeroes. (For example, if the "Chemotherapy -- Summary" and "Chemotherapy -- At This Facility" fields are coded **0** because the first course of treatment included no Chemotherapy, then "Chemotherapy -- Date Started" should be coded **00000000**.) For autopsy-only cases, the date fields should also be zero-filled. Do *not* leave any treatment date field empty.

If, however, a type of treatment *is known to have been given*, but its start date is not known, enter nines *if you cannot estimate* when it began; if the month or *year* can at least be estimated, however, it is important to enter this (such as **99992001**).

Treatment Text -- There is a Narrative field for each treatment modality. These fields should be used to describe first course of treatment as concisely and specifically as possible. If more than one procedure was performed, list each in chronological order, including dates and the place where each procedure occurred. A text field may be left blank when that particular treatment modality was not provided; but, if no cancer-directed Surgery was performed, please record the reason in the "Surgery -- Narrative" field (for example, "mid-June patient refused recommended lobectomy"). Use standard abbreviations and be aware of the maximum number of characters which can fit into each text field.

Date of First-Course Treatment -- COC

NAACCR Version 9.1 field Date of 1st Crs Rx--COC, Item 1270, columns 593-600

This field records the beginning of first course of cancer-directed therapy for the case being reported (using the COC's and MCR's definition of what constitutes the "first course"). Use the MMDDCCYY format.

This date should be either:

- the reported start date for one of the six treatment modalities for a patient who received first-course treatment

or, if the patient received no first-course cancer-directed therapy,

- the date on which a decision was made to not treat the patient (including a date of refusal made by the patient or on the patient's behalf, or a decision to follow "watchful waiting"). If you do not have exact information about when the decision to not treat was made, please estimate this date. Only use the unknown date codes (**99**) when absolutely necessary.

For many cancer patients, the initial cancer-directed therapy is an excisional biopsy. This field will then contain the date that also appears in the "Surgery -- Date Started" field.

For autopsy-only cases, fill in the date of death (Date of Last Contact) here.

The dates of Diagnostic/Staging/Palliative Procedures (such as incisional biopsies or endoscopic exams) should *not* be included in this field. It is seldom appropriate to record the Date of Diagnosis in this field, unless a case was deemed inoperable/untreatable when it was first diagnosed.

DIAGNOSTIC, STAGING, OR PALLIATIVE SURGICAL PROCEDURES

Surgical procedures done to diagnose or stage disease (exploratory) or solely for relief of symptoms (palliative) are Diagnostic/Staging/Palliative Procedures. They include the following:

- Biopsy, incisional (a biopsy leaving gross residual disease)
  (An *excisional* biopsy is cancer-directed Surgery. A biopsy leaving only microscopic residual disease or no residual disease should be considered excisional.)
- Biopsy, NOS
  (Unless otherwise specified, if the specimen size is ≤1 cm, assume the biopsy to have been *in*cisional, and report it as a Diagnostic/Staging/Palliative Procedure.)
- Dilation and curettage for *invasive* cervical cancer
- Dilation and curettage for invasive or *in situ* cancers of the corpus uteri, including choriocarcinoma
- Removal of fluid (paracentesis or thoracentesis), even if cancer cells are present
- Surgery in which tumor tissue is not intentionally removed

  Examples:

  - bypass surgery -- colostomy, esophagostomy, gastrostomy, nephrostomy, tracheostomy, urethrostomy
  - exploratory surgery -- celiotomy, cystotomy, gastrotomy, laparotomy, nephrotomy, thoracotomy
- Removal of non-cancerous endocrine gland(s)
  (but the removal of testes, adrenals or pituitary is Endocrine Surgery for prostate primaries, and should be reported under Hormone Therapy)
- Surgery to relieve pain (e.g., chordotomy)
- Transurethral resection (TUR) without removal of tumor tissue

Brushings, washings, aspiration of cells and hematologic findings (peripheral blood smears) are not surgical procedures. Do not code these for the MCR.

The codes for Diagnostic/Staging/Palliative Procedures are not site-specific:

no Diagnostic, Staging, or Palliative surgery done	**00**
incisional biopsy, needle biopsy, or aspiration biopsy of *other* than the primary site, leaving gross residual disease*	**01**
incisional biopsy, needle biopsy, or aspiration biopsy of the *primary* site, leaving gross residual disease**	**02**
exploratory surgery ONLY (no biopsy)	**03**
bypass surgery or ___ostomy ONLY (no biopsy)	**04**
exploratory surgery plus incisional/needle biopsy of the primary site or other sites	**05**
bypass surgery plus incisional/needle biopsy of the primary site or other sites; ___ostomy plus incisional/needle biopsy of the primary site or other sites	**06**
Diagnostic/Staging/Palliative Procedure(s), NOS	**07**
unknown if any Diagnostic/Staging/Palliative Procedure was done	**09**

* If there is only microscopic residual disease or no residual disease, then consider this to be an excisional biopsy of a non-primary site (cancer-directed Surgery) and code this under Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes.

** If there is only microscopic residual disease or no residual disease, then consider this to be an excisional biopsy of the primary site and code it under Surgery of Primary Site.

The code priorities for the Diagnostic/Staging/Palliative Procedures fields are:

codes **01** - **07** have priority over **09**;
codes **01** - **06** have priority over **07**;
within **01** - **06**, the higher number has priority.

Diagnostic/Staging/Palliative Procedures -- Summary

NAACCR Version 9.1 field "Rx Summ--Dx/Stg/Pall Proc", Item 1350, columns 623-624

Using the code table above, report the Diagnostic/Staging/Palliative Procedures performed during first course of treatment. Enter the best code to represent *all* such procedures performed -- include procedures done at the reporting facility plus all known procedures performed elsewhere. If multiple procedures were performed, follow the code priority rules above, and list these procedures, with their dates and places, in the "Surgery -- Narrative" field.

Diagnostic/Staging/Palliative Procedures -- At This Facility

NAACCR Version 9.1 field "Rx Hosp--Dx/Stg/Pall Proc", Item 740, columns 356-357

Using the code table on the previous page, enter the code for just the Diagnostic/Staging/ Palliative Procedures performed at the reporting facility (including any done in the office of a staff physician, if the information is available to you). If multiple procedures were performed, follow the code priorities listed under the code table, and be sure that all the procedures, with their dates, are included in the "Surgery -- Narrative" field.

Diagnostic/Staging/Palliative Procedures -- Date Started

NAACCR Version 9.1 field "Rx Date--Dx/Stg/Pall Proc", Item 1280, columns 601-608

See the general instructions for treatment date fields on page 151. When multiple procedures were performed, record the date of the first procedure done.

NOTE: There is *not* a separate Narrative field for Diagnostic/Staging/Palliative Procedures. The field "Surgery -- Narrative" records both cancer-directed Surgery and Diagnostic/Staging/Palliative surgical Procedures.

SURGERY (Cancer-Directed)

The COC has replaced the phrases "non cancer-directed surgery" and "cancer-directed surgery" with the phrases "diagnostic, staging, and palliative procedures" and just plain "surgery" without altering the associated fields or data standards. The MCR likes the clarity of the older terms so we have not abandoned them entirely in this Manual. It is especially important to remember that surgical procedures are not limited to the COC's "surgery" fields -- the "diagnostic, staging, palliative procedures" are also considered surgical procedures.

Cancer-directed Surgery is tumor-directed. Its purpose is to modify, control, remove or destroy cancer tissue.

Surgical procedures performed solely for the purpose of establishing a diagnosis or stage of disease or for symptom relief are not cancer-directed. Record such procedures as Diagnostic/Staging/Palliative Procedures.

Excisional biopsies *are* cancer-directed Surgery. When a surgeon states that the procedure was an excisional biopsy or that all gross tumor was removed, code it as excisional even if the pathology report shows microscopic involvement of the margins. If there is no statement that the initial biopsy was "excisional", yet no residual tumor was found at a later resection, assume that the biopsy *was* excisional. If an excisional biopsy is followed by a “re-excision” or “wide excision” during the first course of treatment, include the later information in coding the cancer-directed Surgery. Record the date of an excisional biopsy as the first date of cancer-directed Surgery, whether followed by further definitive surgery or not, and whether or not residual tumor was found in a later resection.

There are four types of cancer-directed Surgery codes collected by the MCR: "Surgery of the Primary Site" (codes in Appendix D); "Scope of Regional Lymph Node Surgery" (codes in Appendix D); "Number of Regional Lymph Nodes Removed"; and "Surgery of Other Regional Sites, Distant Sites, or Distant Lymph Nodes" (codes in Appendix D). The codes in Appendix D are site-specific. Histology is irrelevant when choosing the surgery coding scheme; for example, surgeries for nodal lymphomas are coded using the "Spleen and Lymph Nodes" scheme, while a stomach lymphoma would be coded according to the "Stomach" scheme. Codes for reconstructive/restorative surgical procedures ("Reconstruction -- First Course") are also site-specific and are also in Appendix D.

Surgery of Primary Site

Only record surgeries of the *primary site* in this section. Surgery to remove regional tissues or organs is coded in this section only if these tissues/organs are removed *along with* the primary site as part of a specified code definition (in Appendix D) or in an 'en bloc resection". (An en bloc resection is the removal of multiple organs in one piece at one time.)

> *Example*: When a patient has a modified radical mastectomy, since the breast and axillary contents are removed in one piece (en bloc), "Surgery of Primary Site" is coded as a modified radical mastectomy (**50**), even if pathology finds no nodes in the specimen. (See the codes in Appendix D, page D-46.)

Record a non en bloc resection of a secondary or metastatic site in the field “Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes”.

If no primary site surgical procedure was done, use code **00**.

A biopsy that removes all gross tumor or leaves only microscopically involved margins should be coded here as excisional. A biopsy that is called *excisional* by the performing surgeon should be coded as such, even if residual disease is indicated when the margins are examined.

The operative report title alone may not include enough information to help you assign the best surgery code. Use all of the operative report text and the pathology report to confirm the procedure that was truly done. Use the information from the pathology report when an operative report is unclear or is inconsistent, unless the pathology report states that an accurate accounting of organs removed cannot be given (e.g., tumor encasement, crush artifact, etc.).

The general priority scheme for the "Surgery of Primary Site" codes in Appendix D is as follows:

> codes **10** - **90** have priority over **99**;
>
> codes **10** - **84** have priority over **90** and **99**;
>
> codes **10** - **79** have priority over codes **80**, **90** and **99** (when code **80** is for a site-specific surgery, NOS)

The range of codes **00** - **84** are generally hierarchical -- as the code numbers ascend, the procedures represented become more invasive and/or radical. If more than one code describes the procedure, use the numerically higher code.

If the patient has *multiple* cancer-directed surgeries of the *same* primary site, code the most invasive, definitive surgery (numerically highest code); if the coding scheme allows, assign a specific code that describes the total result of all first-course Primary Site Surgeries.

Examples: A patient has a colonoscopy with removal of a polyp in the sigmoid colon (see the codes in Appendix D, page D-16, code **26**). A week later the patient has a hemicolectomy ("Surgery of Primary Site" code **40**). Record the hemicolectomy code because it is the most invasive, definitive surgery and has the numerically higher code.

Patient has a lung wedge resection (code **21**); later in first-course surgery, the remainder of that lobe is removed. Code a total lobectomy (**31**).

A lymph node dissection during first course of therapy that is performed separately from a Primary Site Surgery may be combined into a single code that represents both surgeries when the coding scheme allows. For example, a simple mastectomy (code **40**) followed by the separate removal of the axillary nodes could be coded as a modified radical mastectomy (**50**).

Code the appropriate surgery for each site when *multiple primaries* are excised at the same time.

Examples: A total abdominal hysterectomy was performed for a patient who had cancer of the cervix and of the endometrium. Code a total abdominal hysterectomy for each of the two primaries.

Patient has a total colectomy for multiple primary cancers originating in several segments of the colon. Code a total colectomy for each primary.

In the "Surgery -- Narrative" field, though, record *all* known primary site surgical procedures done at the reporting institution **and** at other institutions.

Example: "1/15/2001 colonoscopy & polypectomy done here; 1/18/01 hemicolectomy at Hospital B".

Surgery of Primary Site -- Summary

NAACCR Version 9.1 field "Rx Summ--Surg Prim Site", Item 1290, columns 609-610

Using the codes for the appropriate primary site in Appendix D, enter the best code for all Surgery of Primary Site performed as part of first course of treatment. This includes treatment given at the reporting facility, plus all *known* treatment given elsewhere. If multiple procedures were done, code the procedure having the highest code number, and list *all* procedures, with their dates and places of performance, in the "Surgery -- Narrative" field.

Surgery of Primary Site -- At This Facility

NAACCR Version 9.1 field "Rx Hosp--Surg Prim Site", Item 670, columns 341-342

Using the codes in Appendix D, enter the code for the Surgery of the Primary Site performed only at the reporting facility. If multiple primary site procedures were performed at your facility, enter the code for the procedure having the highest code number, and be sure that the "Surgery -- Narrative" field includes all the procedures, with their dates. Include procedures performed in a staff physician's office if you have this information.

Surgery -- Date Started NAACCR Version 9.1 field "Rx Date--Surgery", Item 1200, columns 537-544

See the general instructions on page 151 for treatment date fields. Record the date of an excisional biopsy here, whether followed by further definitive surgery or not, and whether or not residual tumor was found later. Record the earliest date of all coded cancer-directed surgeries (of primary site, regional nodes, other regional sites, distant sites, distant nodes) -- *not* just surgery of the primary site.

Surgery -- Narrative NAACCR Version 9.1 field "Rx Text--Surgery", Item 2610, columns 3747-3896

This field holds up to 150 characters only, yet it often has to include lots of important information. Continue this important narrative in an empty treatment text field or in the "Comments/Narrative Remarks" field if necessary. See the general instructions on page 151 for treatment text fields. Include all known Diagnostic/Staging/Palliative Procedures and Surgery (of primary site, regional nodes, regional sites, distant sites, distant nodes) performed in chronological order, with dates and places (where the surgeries were done). Include reconstructive procedures when possible. If no cancer-directed Surgery was done, give a reason here if known to you (for example, "5/15/2001 pt refused surgery recommended at Hospital B" or "1/18/2001 sigmoidoscopy done here; 1/20/01 excision of rectal mass at Hospl B; 1/25/01 liver mets ablation at Hospl C"). Be specific about describing any Diagnostic/Staging/Palliative Procedures; do not enter vague text like "bx of other than primary site" -- tell us what site was actually biopsied. If the Surgery Date reported is an estimate, note that here.

Scope of Regional Lymph Node Surgery

For most primary sites, these fields define the removal of regional lymph nodes. This refers to the regional lymph node removed that is farthest from the primary site, regardless of its involvement with disease. There is no minimum number of nodes that must be removed. If at least one regional lymph node was removed, the code for this field must be in the range **1-5**. If a regional lymph node was aspirated or biopsied, code "regional lymph node(s) removed, NOS" (**1**).

For head and neck sites, this field describes neck dissections. Codes **2-5** indicate only that a neck dissection was done; they do not imply that nodes were found during the pathologic examination of the specimen. Code a neck dissection here *even if no nodes* were found.

The codes are hierarchical. If more than one procedure was performed, or if more than one code applies, code the procedure that is numerically higher.

Examples: A patient with a head and neck primary has a lymph node biopsy (code **1**), followed by a limited neck dissection (**3**). Code the limited neck dissection.

If a patient has a *modified* radical neck dissection, record code **4** rather than the more generic “neck dissection, NOS” (**2**).

For most primary sites in Appendix D, a list identifies the specific nodes which are regional. (For some primary sites, each subsite has different regional nodes.) Any other nodes are considered *distant* and are coded in “Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes”.

If no cancer-directed surgical procedure was performed, enter code **0**.

Scope of Regional Lymph Node Surgery -- Summary

NAACCR Version 9.1 field "Rx Summ--Scope Reg LN Sur", Item 1292, column 611

Using the codes for the appropriate primary site in Appendix D, report the Scope of Regional Lymph Node Surgery done at your facility and elsewhere if known to you.

Scope of Regional Lymph Node Surgery -- At This Facility

NAACCR Version 9.1 field "Rx Hosp--Scope Reg LN Sur", Item 672, column 343

Using the codes in Appendix D, code just the Scope of Regional Lymph Node Surgery done at your facility. Include procedures done in a staff physician's office (if available).

Number of Regional Lymph Nodes Removed

Record the number of regional nodes microscopically examined and documented in the pathology report from only the surgical procedure(s) coded in the "Surgery of Primary Site" fields. Do not add numbers of nodes removed at different surgical events.

If *no* regional lymph nodes are identified in the pathology report, code **00** here, even if the surgical procedure usually includes a lymph node dissection (e.g., modified radical mastectomy), or if the operative report documents the removal of nodes.

Note: Because these fields are *not* cumulative and not affected by timing, they do not duplicate the field "Regional Nodes Examined" (which describes *all* regional nodes removed during the entire first course of treatment). Do not automatically copy one field to another. (See pages 142-143 for the field "Regional Nodes Examined".)

For all cases with a *primary site* of lymph nodes (C77._), fill the Number of Regional Lymph Nodes Removed fields with code **99**. Do *not* code *all* lymphomas this way -- just those with lymph node primary sites. Also use code **99** for leukemias.

For all cases with an unknown primary site (C80.9), fill the Number of Regional Lymph Nodes Removed fields with code **99**.

There are **NO** regional lymph nodes for the brain (C71._, C70.0). Enter code **99** for all cases with a brain/cerebral meninges primary site code.

Codes for all cases *except* leukemias and those with primary sites Brain, Cerebral Meninges, Lymph Nodes, and Unknown Primary Site follow:

Number of Regional Lymph Nodes Removed	**Code**
None removed	**00**
One removed	**01**
Two removed	**02**
.....	.....
Ninety or more removed	**90**
Regional lymph node removal was documented as a sampling and the exact number of lymph nodes was unknown/not stated.	**96**
No regional lymph node(s) were actually removed, but a regional lymph node aspiration was performed.	**95**
Regional lymph node removal was documented as a dissection and the exact number of lymph nodes was unknown/not stated.	**97**
Regional lymph nodes were surgically removed, but the number was unknown/not stated and the removal was not documented as a "sampling" or "dissection".	**98**
Unknown number removed; number removed not stated; death certificate only	**99**

Number of Regional Lymph Nodes Removed -- Summary

NAACCR Version 9.1 field "Rx Summ--Reg LN Examined", Item 1296, columns 613-614

Using the codes above, record the Number of Regional Lymph Nodes Removed at your facility and elsewhere for the surgical procedure coded in "Surgery of Primary Site -- Summary".

Number of Regional Lymph Nodes Removed -- At This Facility

NAACCR Version 9.1 field "Rx Hosp--Reg LN Removed", Item 676, columns 345-346

Using the codes above, record just the Number of Regional Lymph Nodes Removed at your facility for the procedure coded in "Surgery of Primary Site -- At This Facility".

Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes

These fields describe the *separate* (not en bloc with the primary) removal of tissue(s) or organ(s) *other than* the primary tumor/organ of origin. If regional/distant tissues/organs were removed in continuity with the primary tumor (en bloc), their removal is reported under Surgery of the Primary Site rather than here. Include the removal of any non-primary tissue that was removed because the surgeon *suspected* malignant involvement, even if the pathology was negative. Do not code the *incidental* removal of tissue (i.e., removed for reasons other than suspected malignancy).

Examples: During a colon resection, the surgeon noted cholelithiasis and removed the gallbladder. The gallbladder's removal is *incidental* and should not be coded in any field.

In the above example, if the gallbladder had been removed separately because it was suspicious for cancer involvement, its removal would be coded in this field *regardless* of what the pathology report revealed about the specimen's actual involvement.

During a rectal resection, the surgeon destroyed a spot on the liver that was presumed to be cancerous. Code in this field the ablation of a single liver metastasis even though there was no pathologic verification that the tissue destroyed was indeed cancer.

Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes -- Summary

NAACCR Version 9.1 field "Rx Summ--Surg Oth Reg/Dis", Item 1294, column 612

Using the codes for the appropriate primary site in Appendix D, report the Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes performed at your facility and elsewhere (if known to you).

Codes **1 - 8** have priority over code **9**.

Surgery of Other Regional Sites, Distant Sites, or Distant Lymph Nodes -- At This Facility

NAACCR Version 9.1 field "Rx Hosp--Surg Oth Reg/Dis", Item 674, column 344

Using the codes in Appendix D, report just the Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes performed at your facility as part of first course of therapy. Include procedures performed in a staff physician's office if known to you.

Codes **1 - 8** have priority over code **9**.

Reconstruction -- First Course

NAACCR Version 9.1 field "Rx Summ--Reconstruct 1st", Item 1330, column 621

This field codes surgical procedures that improve the shape, appearance or function of body structures that are missing, defective, damaged or misshapen by cancer *or* its treatment.

This field is limited to procedures started during the first course of therapy. Some reconstructive procedures involve several events; only code these here if the first event occurred during the first course of treatment. The MCR does not collect data on procedures which *started* after the first course of treatment's completion (or *delayed* reconstruction).

Use the codes for the appropriate primary site in Appendix D. Code *only* those procedures specifically listed for each site. Codes **1 - 8** have priority over code **9**.

Reason For No Surgery

NAACCR Version 9.1 Item 1340, column 622

For *all* cancers, this field records if cancer-directed Surgery was done; and if it was *not* done, it records a reason *why* it was not done. This includes all first-course cancer-directed Surgery of the primary site, regional lymph nodes, other regional sites, distant sites or distant lymph nodes. Include all Surgery performed as part of first course of therapy that is known to you (i.e., what is coded in the *summary* Surgery fields -- not just what was done at your facility).

Record a reason why cancer-directed Surgery was not performed for this case; or, if it was performed, enter **0**.

Enter the most applicable number from the following codes:

Surgery was performed. (At least one of the Surgery summary fields must be coded without **00** or **0**.)	**0**
Surgery was not recommended. (includes inoperable cancer, widespread cancer, and conditions not treated surgically, such as leukemia)	**1**
Surgery was contraindicated because of other conditions; also autopsy-only cases (includes advanced age and the presence of other diseases, such as heart disease, that would contraindicate surgery)	**2**
The reason for no Surgery is unknown. (Cancer-directed surgery would have been the treatment of choice, but it was not performed, and a reason is not given.)	**6**
patient/guardian refused Surgery (Cancer-directed surgery was the treatment of choice and was recommended by the physician, but the patient, a family member, or a guardian refused the surgery.)	**7**
Surgery was recommended, but it's not known if it was performed. (Cancer-directed surgery was recommended by a physician, but no follow-up information is available to confirm if the surgery was performed.)	**8**
unknown if Surgery recommended or performed; (also death certificate-only cases) (No confirmation if Surgery was recommended or performed.)	**9**

RADIATION THERAPY

Code the type of Radiation Therapy that the patient received. This field records radiation administered to the primary site or any metastatic site for *curative, palliative* or *prophylactic* intent, remembering that the treatment must be cancer-directed. For example, radiation administered to alleviate the pain caused by bony metastases is not meant to cure the cancer, but it is still cancer-directed therapy because it kills cancer cells in the body. For primary lung cancers and leukemia cases, include radiation given to the brain and CNS in this field. Record all procedures that are part of the first course of therapy.

Do not include radiation for hormonal effect, such as irradiation of non-cancerous endocrine glands. Do not include irradiation of the male breast to prevent gynecomastia.

Types of Radiation

The primary types of Radiation Therapy include the external administration of radioactive beams, implantation of radioactive material, and the internal administration of radioisotopes by means other than implantation. Radioactive materials include the following:

Au^{198}	gold	P^{32}	phosphorus
Co^{60}	cobalt	Pb^{210}	lead
CrO_4P	chromic phosphate	Ra^{226}	radium
$Cr^{32}PO_4$	phosphocol	Rn^{222}	radon
Cs	cesium	Ru^{106}	ruthenium
I^{125} and I^{131}	iodine	Sr^{89} and Sr^{90}	strontium
Ir^{192}	iridium	Y^{90}	yttrium

Beam (Teletherapy) (code **1**) -- The source of radiation is outside the patient, as in a cobalt machine or linear accelerator. Examples of beam radiation include the following:

Betatron	Linear accelerator (LINAC)
Brachytron	MeV
Cobalt	Neutron beam
Cyclotron	Spray radiation
Grenz ray	Stereotactic radiosurgery (gamma knife, proton beam)
Helium ion or other heavy particle beam	X-ray

Radioactive Implants (code **2**) -- Radioactive materials administered by interstitial implants, molds, seeds, needles or intracavitary applicators, including brachytherapy. (Heyman capsules, Fletcher suit, and Fletcher after-loader are methods of isotope application. Interpret these terms as radioactive implants.)

Other Internal Radiation (code **3**) -- Record the name or chemical symbol and method of administration of any radioactive material given orally, intracavitarily, or by intravenous injection. (I^{131}-labeled immunoglobin is coded both as a radioisotope and Immunotherapy.)

Use the following codes for Radiation Therapy:

no Radiation Therapy given	**0**
beam radiation (X-ray, cobalt, linear accelerator, neutron beam, spray radiation, intra-operative radiation and stereotactic radiosurgery, gamma knife and protein beam)	**1**
radioactive implants (brachytherapy, interstitial implants, molds, seeds, needles or intracavitary applicators of radioactive materials -- cesium, radioactive gold, radium, radon)	**2**
radioisotopes (internal use of radioactive isotopes, such as iodine-131, phosphorus-32, strontium-89, strontium-90)	**3**
combination(s) of beam radiation with radioactive implants or with radioisotopes given internally (combination of **1** with **2** and/or **3**)	**4**
Radiation Therapy, NOS (method or source not specified)	**5**
unknown if Radiation Therapy administered	**9**

Note: Codes 7 and 8 are no longer used for diagnoses as of January 1, 1996. If a patient/guardian refused Radiation Therapy, use code **0**. If Radiation Therapy was recommended but you do not know if it was ever given, also use code **0**.

Radiation Therapy -- Summary

NAACCR Version 9.1 field "Rx Summ--Radiation", Item 1360, column 625

Using the code table above, code all the first course of treatment Radiation Therapy received by the patient at your facility *and* elsewhere (if known to you).

Radiation Therapy -- At This Facility

NAACCR Version 9.1 field "Rx Hosp--Radiation", Item 690, column 351

Using the code table above, code just the Radiation Therapy administered at your facility. Include treatment administered in the office of a physician on your medical staff (if recorded in your facility's medical record).

Radiation Therapy -- Date Started

NAACCR Version 9.1 field "Rx Date--Radiation", Item 1210, columns 545-552

See the Treatment Date instructions on page 151.

Radiation Therapy -- Narrative

NAACCR Version 9.1 field "Rx Text--Radiation (Beam)", **Item 2620**, columns 3897-4046

This field holds up to 150 characters. See the Treatment Text instructions on page 151. Although this NAACCR field is meant to contain only information on beam Radiation Therapy (code **1**), please note that the MCR does *not* collect the companion field "Rx Text--Radiation Other" (NAACCR Item 2630) where any nonbeam Radiation Therapy would be described. Please describe all types of Radiation Therapy given to the patient in Item 2620 for the MCR. For your own purposes, you may also separately describe nonbeam radiation in Item 2630, but remember that anything you record there will not be seen by the MCR. If we see any type of Radiation coded that is not documented in Item 2620, we may have to call you to clarify the apparent discrepancy. If the Radiation Date reported is an estimate, note that here.

Radiation / Surgery Sequence

NAACCR Version 9.1 field "Rx Summ--Surg/Rad Seq", Item 1380, column 627

This field defines the order in which first-course Radiation Therapy and cancer-directed Surgery were delivered. This includes all first-course Radiation and Surgery (as coded in the *summary* therapy fields) rather than just treatment given at your facility. Enter codes in the range **2-9** if the patient had both Radiation and Surgery during first-course treatment. Diagnostic/Staging/Palliative Procedures (e.g., incisional biopsy, exploratory surgery) do not qualify, but all types of cancer-directed Surgery (including surgery of primary site, regional lymph nodes, other regional sites, distant sites or distant lymph nodes) are included.

Code Radiation / Surgery Sequence as follows:

no Radiation Therapy and/or cancer-directed Surgery	**0**
Radiation Therapy before cancer-directed Surgery	**2**
Radiation Therapy after cancer-directed Surgery	**3**
Radiation Therapy both before and after cancer-directed Surgery	**4**
intraoperative Radiation Therapy alone	**5**
intraoperative Radiation Therapy with other Radiation Therapy given before or after cancer-directed Surgery	**6**
sequence unknown, but both Radiation Therapy and cancer-directed Surgery were administered	**9**

CHEMOTHERAPY

Chemotherapeutic agents are anticancer drugs that inhibit the reproduction of cancer cells by interfering with DNA synthesis and mitosis, causing the cells to die. Chemotherapy may be administered by intravenous infusion or given orally. They may also be topical, intrathecal, intracavitary or intra-arterial. Methods of administration are not coded for the MCR.

Chemotherapy agents may be administered singly or in combination regimens of two or more chemotherapy drugs. The drugs are frequently given in combinations referred to by acronyms or protocols. You may use standard acronyms and abbreviations, but do not enter protocol numbers alone. Two or more single agents given at separate times during first course of therapy are considered to be a *combination* regimen. See the *SEER Self Instructional Manual for Tumor Registrars: Book 8, 3rd Ed*. (1993) for a list of the standard acronyms used for combination regimens (pages 29-31).

Chemotherapy is often administered in treatment cycles with the time span of each cycle varying. Chemotherapy may be administered for several weeks or years. For the MCR, only record Chemotherapy that is part of first course of treatment.

Also record Chemotherapy as cancer-directed therapy when it is delivered *concurrently* or as *adjuvant* or *neo-adjuvant* treatment. Concurrent chemotherapeutic agents are used in combination with other modes of therapy (surgery, radiation, etc.) to treat cancer. In adjuvant therapy, when other methods have already destroyed clinically detectable cancer cells, Chemotherapy is given to prevent or delay a recurrence by destroying micrometastases (undetected cancer cells). Neo-adjuvant therapy is given before Surgery or Radiation Therapy to help reduce the size (bulk) of a tumor.

Chemotherapy may be divided into the following four groups:

Group I: Alkylating Agents

Busulfan (Myleran)	DTIC (Dacarbazine)
Carmustine (Lomustine)	Mechlorethamine (Mustargen)
Chlorambucil (Leukeran)	Phenylalanine mustard (Melphalan)
Cyclophosphamide (Cytoxan)	Triethylene-thiophosphoramide (Thio-TEPA)

Group II: Antimetabolites

Folic acid analogs:	Methotrexate (Amethopterin, MTX)
Pyrimidine analogs:	5-Fluorouracil (5-FU)
Purine analogs:	6-Mercaptopurine (6-MP)

Group III: Natural Products

Antitumor antibiotics:	Bleomycin (Blenoxane)
	Dactinomycin (Actinomycin D)
	Daunorubicin (Daunomycin)
	Doxorubicin (Adriamycin)
	Mitomycin C (Mutamycin)
Vinca (plant) alkaloids:	Vinblastine (VBL, Velban)
	Vincristine (VCR, Oncovin)
Enzymes:	L-Asparaginase (Elspar)

Group IV: Miscellaneous Agents

Cis-diammine dichloroplatinum II (Cisplatin)

Hydroxyurea (Hydrea)

Procarbazine (Matulane)

See the *SEER Self Instructional Manual for Tumor Registrars: Book 8, 3rd Ed*. (1993) for a comprehensive list of chemotherapy agents in use at the time of its publication (pages 5-28).

When a patient has an adverse reaction to initial chemotherapy, a physician may change one of the agents being administered. If the replacement drug belongs to the same group (Groups I-IV shown above) as the original drug, there is considered to have been *no change in the regimen* and this is just a continuation of the planned first course of therapy; but if the replacement agent falls into a different group than the original drug, then this is considered a *new regimen* and *subsequent therapy* (i.e., not first-course and not collected by the MCR).

Note: Leucovorin is an example of an ancillary drug which may be administered in conjunction with chemotherapeutic agents. See pages 35-46 in the *SEER Self Instructional Manual for Tumor Registrars: Book 8, 3rd Ed.* (1993) for a list of ancillary drugs. Ancillary drugs are not coded for the MCR, but they may be recorded in the "Chemotherapy -- Narrative" field.

Example: 5-FU and Leucovorin are both given to a cancer patient as part of the planned first course of therapy. If there are no additional Chemotherapy agents given, the correct Chemotherapy code is **2** ("single agent") -- not **3** ("multiple agents"). Chemotherapy -- Narrative could say "5-FU (+ Leucovorin)".

When Prednisone (a hormone) is given in combination with a chemotherapy agent, the Prednisone is coded as Hormone Therapy and the Chemotherapy agent alone is coded here.

Use the following codes for Chemotherapy:

no Chemotherapy given	**0**
Chemotherapy, NOS	**1**
Chemotherapy, single agent	**2**
Chemotherapy, multiple agents (combination regimen)	**3**
unknown if chemotherapy recommended or administered	**9**

Notes: In the range **1-3**, the higher code number has priority.

Codes 7 and 8 are no longer used for diagnoses as of January 1, 1996. If a patient/guardian refused Chemotherapy, use code **0**. If Chemotherapy was recommended but you do not know if it was ever given, also use code **0**.

Chemotherapy -- Summary

NAACCR Version 9.1 field "Rx Summ--Chemo", Item 1390, column 628

Using the code table on the preceding page, report all the Chemotherapy given to the patient as part of first course of treatment. Include Chemotherapy given at your institution *and* at all others (if known to you).

Chemotherapy -- At This Facility

NAACCR Version 9.1 field "Rx Hosp--Chemo", Item 700, column 352

Using the code table on the preceding page, report just the Chemotherapy administered at your facility as part of first course of treatment. Include treatment delivered in a staff physician's office if this is recorded in your facility's medical record.

Chemotherapy -- Date Started

NAACCR Version 9.1 field "Rx Date--Chemo", Item 1220, columns 553-560

See the Treatment Date instructions on page 151.

Chemotherapy -- Narrative

NAACCR Version 9.1 field "Rx Text--Chemo", Item 2640, columns 4197-4396

This field may contain up to 200 characters. Record the generic or trade names of the Chemotherapy agents used. Include those that are in the investigative or clinical trial phase. See the *SEER Self Instructional Manual for Tumor Registrars: Book 8, 3rd Ed*. (pages 5-31) for a comprehensive list of chemotherapeutic agents and regimens in use at the time of its publication. You may use standard abbreviations and acronyms (such as "5-FU" and "MOPP"), but do not enter protocol numbers alone. See pages 29-31 in *SEER Book 8* for combination regimen standard acronyms. The names of (uncoded) ancillary drugs given along with Chemotherapy agents may also be included here. If the Chemotherapy Date reported is an estimate, note that here.

HORMONE / STEROID / ENDOCRINE THERAPY

Hormones promote hormonal withdrawal or hormonal interface to alter cancer growth. Hormonal therapy may effect a long-term control of the cancer, but it is not usually used to "cure" the cancer.

Code the type of Hormone Therapy the patient received as part of first course of therapy. Record surgery performed for hormonal effect (such as orchiectomy) and radiation given for hormonal effect.

Hormones and Antihormones

Report cancer-directed treatment with hormones and antihormones for all sites and types of cancer. Report cancer-directed use of adrenocorticotrophic hormones for the treatment of leukemias, lymphomas, multiple myeloma, and breast and prostate cancers.

Code Prednisone as Hormonal Therapy when it is given in combination with Chemotherapy (e.g., MOPP or COPP) for cancer of *any* site. If administered for other reasons, do *not* code such agents as Hormone Therapy.

Examples:

- A patient with advanced cancer is given Prednisone to stimulate appetite. Do not code this.
- A patient with advanced lung cancer has multiple brain metastases. The physician orders Decadron to reduce edema in the brain and relieve neurological symptoms. This use of Decadron is not coded as Hormone Therapy.

Hormone classifications include the following:

adrenocorticosteroids (Prednisone, Decadron)

androgens (Halotestin)

antiestrogens (Tamoxifen, Nolvadex)

estrogens (DES, diethylstilbestrol)

hormone synthesis inhibitors (Elipten, Cytadren)

progestins (Provera, Megace)

For a more complete list of hormonal agents, see the *SEER Self Instructional Manual for Tumor Registrars: Book 8, 3rd Ed*. (1993).

Thyroid-stimulating hormone (TSH) is normally *replacement* therapy and *not* tumor-directed; however, the administration of thyroid hormone preparations (like Synthroid) following thyroidectomy *is* definitive Hormonal Therapy because the TSH has a dual role in such cases -- as replacement therapy *and* to inhibit cancer recurrence and metastasis. Exogenous dissected thyroid may be used in treatment following a subtotal or total thyroidectomy.

Endocrine Surgery and/or Endocrine Radiation

For reporting purposes, endocrine surgery/radiation (code **2**) is defined as the total removal/irradiation of an endocrine gland (*both* glands or all of one remaining gland in the case of paired glands). Record endocrine surgery and/or radiation for treatment of cancer of the prostate only. Endocrine surgical procedures are as follows:

adrenalectomy

hypophysectomy

orchiectomy

Report any type of radiation directed toward an endocrine gland to affect hormonal balance in these circumstances:

- treatment is for cancer of the prostate;
- both paired glands (testes, adrenals) or all of a remaining gland have/has been irradiated.

If tumor tissue is present in a gland removed in the course of endocrine therapy, record the procedure as cancer-directed Surgery also.

Use the following codes for Hormone Therapy:

no Hormone Therapy given	**0**
hormones (including NOS and antihormones)	**1**
endocrine surgery and/or endocrine radiation therapy (if cancer is of another site)	**2**
combination of **1** and **2**	**3**
unknown if Hormone Therapy recommended or administered	**9**

Note: Codes 7 and 8 are no longer used for diagnoses as of January 1, 1996. If a patient/guardian refused Hormone Therapy, use code **0**. If Hormone Therapy was recommended but you do not know if it was ever given, also use code **0**.

Hormone Therapy -- Summary

NAACCR Version 9.1 field "Rx Summ--Hormone", Item 1400, column 629

Using the code table above, report *all* Hormone Therapy performed at your facility *and* elsewhere (if known to you) as part of first course of treatment.

Hormone Therapy -- At This Facility

NAACCR Version 9.1 field "Rx Hosp--Hormone", Item 710, column 353

Using the code table above, report just the first course of treatment Hormone Therapy received at your facility. Include treatment given in a staff physician's office (if known to you).

Hormone Therapy -- Date Started

NAACCR Version 9.1 field "Rx Date--Hormone", Item 1230, columns 561-568

See the Treatment Date instructions on page 151.

Hormone Therapy -- Narrative

NAACCR Version 9.1 field "Rx Text--Hormone", Item 2650, columns 4397-4596

This field may contain up to 200 characters. See the Treatment Text instructions on page 151. If the Hormone Therapy Date reported is an estimate, note that here.

IMMUNOTHERAPY

Immunotherapy (biological response modifier therapy, BRM) consists of biological or chemical agents that alter the immune system or change a patient's response to tumor cells. Code only Immunotherapy that the patient received as part of first course of therapy.

Immunotherapy agents include:

- allogeneic cells
- BCG vaccine
- bone marrow transplant
- C-Parvum
- Interferon
- Interleukin
- LAK (lymphokine activated killer) cells
- Levamisole
- MVE-2
- Pyran copolymer
- Thymosin
- vaccine therapy
- virus therapy

Refer to the *SEER Self Instructional Manual for Tumor Registrars: Book 8, 3rd Ed*. (1993), pages 55-67, for a complete list of Immunotherapy agents.

Note: *Book 8* lists Epogen (Procrit) and Neupogen as BRM agents, but errata issued by SEER corrected these listings to the "ancillary" drug category. Epogen and Neupogen should not be coded in any First Course of Treatment modality.

Use the following codes for Immunotherapy:

no Immunotherapy given	**0**
biological response modifier (BRM)	**1**
bone marrow transplant - autologous	**2**
bone marrow transplant - allogeneic	**3**
bone marrow transplant, NOS	**4**
stem cell transplant	**5**
combination of **1** and any of **2-5**	**6**
patient/guardian refused Immunotherapy	**7**
Immunotherapy recommended, but unknown if administered	**8**
unknown* if Immunotherapy recommended or administered	**9**

* There is reason to believe that Immunotherapy was recommended or given, but there is no information to confirm this.

Immunotherapy -- Summary

NAACCR Version 9.1 field "Rx Summ--BRM", Item 1410, column 630

Using the code table on the preceding page, record all first course of therapy Immunotherapy procedures done at your institution, and at all other institutions if known to you.

Immunotherapy -- At This Facility

NAACCR Version 9.1 field "Rx Hosp--BRM", Item 720, column 354

Using the code table on the preceding page, record just the procedures done at your facility. Include treatment given in a staff physician's office (if known to you).

Immunotherapy -- Date Started

NAACCR Version 9.1 field "Rx Date--BRM", Item 1240, columns 569-576

See the Treatment Date instructions on page 151.

Immunotherapy -- Narrative

NAACCR Version 9.1 field "Rx Text--BRM", Item 2660, columns 4597-4696

This field may contain up to 100 characters. See the Treatment Text instructions on page 151. If the Immunotherapy Date reported is an estimate, note that here.

OTHER CANCER-DIRECTED THERAPY

Other Cancer-Directed Therapy includes treatments given as part of first course of therapy designed to modify or control cancer cells that are not defined in the Surgery, Radiation, Chemotherapy, Hormone Therapy or Immunotherapy fields.

Examples:

- tumor embolization (arterial block) if the surgeon's intent is to kill tumor cells
- any cancer-directed experimental drug that cannot be classified as Chemotherapy, Hormone Therapy or Immunotherapy (code **2**); this includes Thalidomide when used as an anti-angiogenesis agent and Herceptin (a biological response modifier not yet listed in *SEER Book 8*).
- hyperbaric oxygen (as an adjunct to definitive treatment)
- hyperthermia (given alone or in combination with Chemotherapy, as in isolated heated limb perfusion for melanoma)
- double-blind clinical trial information where the type of agent administered is unknown and/or there is use of a placebo (code **3**). After the code is broken, report the treatment under the appropriate modality (e.g., if the agent is revealed to be a Chemotherapy agent, code it as Chemotherapy and delete the Other Therapy code that had been applied temporarily). (To report changes to data already submitted to the MCR, call a cancer registrar at 617-624-5645).
- unorthodox and unproven treatments if these are the *only* treatment received by the patient (code **6**). These include but are not limited to: Laetrile, Krebiozen, Iscador; acupuncture/pressure; homeopathic or herbal medicine, nutritional supplements; bioelectromagnetic applications; relaxation techniques, humor therapy. If the patient receives a combination of such unorthodox treatments in addition to cancer-directed Surgery, Radiation, Chemotherapy, Hormone Therapy or Immunotherapy, then do *not* code the unorthodox treatment(s). See the *SEER Program Code Manual, 3rd Ed*. (1998), pages 140-141, for a fuller discussion.

{Do *not* code ancillary (non cancer-directed) drugs. These have *no coding scheme.*) You may record their use in a treatment Narrative field, but since their effects are not cancer-directed, it is not necessary to report them to the MCR.

Examples: Allopurinol, Epogen*, G-CSF (granulocyte colony stimulating factor), Leucovorin, Neupogen*

Note: This is only a partial list. Refer to the *SEER Self Instructional Manual for Tumor Registrars: Book 8, 3rd Ed.*, pages 35-46, for a more complete listing.

* Epogen and Neupogen were incorrectly listed in *Book 8* as BRM agents. SEER errata corrected these listings to the "ancillary" drug category.}

Special Rules for Hematopoietic Diseases

For many of the hematopoietic diseases that became reportable for diagnoses made as of 2001 (such as refractory anemia), the principal treatment given may not meet the standard definition of cancer-directed therapy. SEER and the COC have agreed to record the following treatments as "Other Cancer-Directed Therapy" for hematopoietic diseases only:

- blood transfusion [of whole blood, red blood cells (RBC), platelets, fresh frozen plasma (FFP); includes cryoprecipitation, plateletpheresis]
- phlebotomy (blood removal, bloodletting, venesection)
- aspirin* [acetylsalicylic acid (ASA)]
- supportive care
- observation (watchful waiting)

* especially used to treat symptoms of essential thrombocythemia by thinning the blood; if the *reason* aspirin is given is not recorded, use the following guidelines:

if low-dose (70-100 mg/day), assume this is intended to thin the blood to help treat the disease and *record this* as Other Cancer-Directed Therapy;

if dosage is at least 160 mg/day but is not as high as the category below, assume this is for cardiovascular protection and do *not* code as cancer-directed therapy;

if higher-dose (325-1000 mg every 3-4 hours), assume this is for pain control and do *not* record as cancer-directed therapy.

Standard cancer-directed therapy for hematopoietic diseases (Radiation, Chemotherapy, Surgery) such as phosphorus-32 radiation for polycythemia vera and splenectomy for myelofibrosis should be recorded as usual in the appropriate treatment modality categories.

Use the following codes for Other Cancer-Directed Therapy:

no Other Cancer-Directed Therapy given	**0**
Other Cancer-Directed Therapy, NOS	**1**
Other *experimental* Cancer-Directed Therapy (not included elsewhere)	**2**
double-blind clinical trial, code not yet broken (Code and report* the treatment actually given when the code is broken.)	**3**
only unproven therapy/therapies given (includes Laetrile, Krebiozen, treatment given by nonmedical personnel, etc.)	**6**
patient/guardian refused therapy which, if given, would have been coded as 1-3 above	**7**
Other Cancer-Directed Therapy recommended, but unknown if administered	**8**
unknown** if Other Cancer-Directed Therapy recommended or given	**9**

* Call us (617-624-5645) to report changes to case reports already submitted to us. Ask for a cancer registrar.

** There is reason to believe that Other Cancer-Directed Therapy was recommended or given, but there is no information to confirm this.

Other Cancer-Directed Therapy -- Summary

NAACCR Version 9.1 field "Rx Summ--Other", Item 1420, column 631

Using the table above, code Other Cancer-Directed Therapy received by the patient as part of first-course therapy. Record all procedures done at your institution and all others (if known).

Other Cancer-Directed Therapy -- At This Facility

NAACCR Version 9.1 field "Rx Hosp--Other", Item 730, column 355

Using the table above, code only Other Cancer-Directed Therapy given at your facility. Include treatment given in a staff physician's office (if available).

Other Cancer-Directed Therapy -- Date Started

NAACCR Version 9.1 field "Rx Date--Other", Item 1250, columns 577-584

See the Treatment Date instructions on page 151 and the discussion of what constitutes "Other Cancer-Directed Therapy" on pages 178-179.

Other Cancer-Directed Therapy -- Narrative

NAACCR Version 9.1 field "Rx Text--Other", Item 2670, columns 4697-4796

This field may hold up to 100 characters. See the Treatment Text instructions on page 151 and the discussion of what constitutes "Other Cancer-Directed Therapy" on pages 178-179.

Appendix A

Codes for Data Fields

"Birthplace" and

"Place of Death"

BIRTHPLACE and PLACE OF DEATH Codes -- *numerical list*

CONTINENTAL UNITED STATES and HAWAII

Codes for the United States are by section of the country. The second digit represents the first digit of the ZIP Code. For convenience, U.S. postal abbreviations are shown in square brackets, but remember that "Birthplace" and "Place of Death" hold the *numeric* codes shown at the left.

000 United States, NOS

001 Northeast states, NOS; New England, NOS

002 Maine [ME]
003 New Hampshire [NH]
004 Vermont [VT]
005 Massachusetts [MA]
006 Rhode Island [RI]
007 Connecticut [CT]
008 New Jersey [NJ]

010 North Mid-Atlantic states, NOS

011 New York [NY]
014 Pennsylvania [PA]
017 Delaware [DE]

020 South Mid-Atlantic states, NOS

021 Maryland [MD]
022 District of Columbia [DC]; Washington, DC
023 Virginia [VA]
024 West Virginia [WV]
025 North Carolina [NC]
026 South Carolina [SC]

030 Southeastern states, NOS

031 Tennessee [TN]
033 Georgia [GA]
035 Florida [FL]
037 Alabama [AL]
039 Mississippi [MS]

040 North Central states, NOS

041 Michigan [MI]
043 Ohio [OH]
045 Indiana [IN]
047 Kentucky [KY]

050 Northern Midwest states, NOS

051 Wisconsin [WI]
052 Minnesota [MN]
053 Iowa [IA]
054 North Dakota [ND]
055 South Dakota [SD]
056 Montana [MT]

060 Central Midwest states, NOS

061 Illinois [IL]
063 Missouri [MO]
065 Kansas [KS]
067 Nebraska [NE]

070 Southern Midwest states, NOS

071 Arkansas [AR]
073 Louisiana [LA]
075 Oklahoma [OK]
077 Texas [TX]

080 Mountain states, NOS

081 Idaho [ID]
082 Wyoming [WY]
083 Colorado [CO]
084 Utah [UT]
085 Nevada [NV]
086 New Mexico [NM]
087 Arizona [AZ]

090 Pacific Coast states, NOS

091 Alaska [AK]
093 Washington [WA]
095 Oregon [OR]
097 California [CA]
099 Hawaii [HI]

UNITED STATES POSSESSIONS

When these codes were originally assigned during the 1970's, the United States owned or controlled islands in the Pacific. Many of these islands have been either granted independence or control has been returned to another country. To be consistent, these islands are still coded to the original codes. The names have been annotated to indicate the new political designation. Some US Postal abbreviations are shown in square brackets for convenience, but remember that "Birthplace" and "Place of Death" hold the *numeric* codes shown at the left.

100 Atlantic/Caribbean area, U.S. possessions, NOS

- 101 Puerto Rico [PR]
- 102 U.S. Virgin Islands [VI]
- 109 other Atlantic/Caribbean area

See codes **240** - **249** for non-U.S. possessions in this region.

110 Canal Zone

120 Pacific area, U.S. possessions, NOS

- 121 American Samoa [AS]
- 122 Kiribati; Canton and Enderbury Islands; Gilbert Islands; Phoenix Islands; Southern Line Islands
- 123 Micronesia*, Federated States of [FM]; Caroline Islands (Trust Territory of Pacific Islands)
- 124 Cook Islands (New Zealand)
- 125 Tuvalu; Ellice Islands
- 126 Guam [GU]
- 127 Johnston Atoll
- 129 Mariana Islands [MP], Northern (Trust Territory of Pacific Islands)
- 131 Marshall Islands [MH] (Trust Territory of Pacific Islands)
- 132 Midway Islands
- 133 Nampo-Shoto, Southern
- 134 Ryukyu Islands (Japan)
- 135 Swan Islands
- 136 Tokelau Islands (New Zealand)
- 137 Wake Island
- 139 Palau [PW] (Belau) (Trust Territory of Pacific Islands)

See codes **711** - **725** for non-U.S. possessions in this region.

* Do not confuse with code **723** (=Micronesian Islands, *not* U.S. possession)

NORTH and SOUTH AMERICA, Exclusive of the U.S. and its Possessions

210 Greenland

220 Canada, NOS (Canadian postal abbreviations for provinces are shown in square brackets.)

221 Maritime provinces; Labrador; New Brunswick [NB]; Newfoundland [NF]; Nova Scotia [NS]; Prince Edward Island [PE]

222 Quebec [QC]

223 Ontario [ON]

224 Prairie provinces; Alberta [AB]; Manitoba [MB]; Saskatchewan [SK]

225 Northwest Territories [NT]; Nunavut [NU]; Yukon Territory [YT]

226 British Columbia [BC]

230 Mexico

240 North American Islands, NOS

241 Cuba

242 Haiti

243 Dominican Republic

244 Jamaica

245 other Caribbean islands; Anguilla; Antigua; Antilles, NOS; Aruba; Barbados; Barbuda; British Virgin Islands; British West Indies; Caicos Islands; Caribbean, NOS; Cayman Islands; Curacao; Dominica; French West Indies; Grenada; Grenadines; Guadeloupe; Leeward Islands, NOS; Martinique; Montserrat; Netherlands Antilles; Nevis; St. Christopher-Nevis; St. Kitts; St. Lucia; St. Vincent; Tobago; Trinidad; Turks Islands; West Indies, NOS; Windward Islands, NOS

246 Bermuda

247 Bahamas

249 Miquelon; St. Pierre

250 Central America, NOS

251 Guatemala

252 Belize; British Honduras

253 Honduras, NOS

254 El Salvador

255 Nicaragua

256 Costa Rica

257 Panama

260 North America, NOS

265 Latin America, NOS

300 South America, NOS

311 Colombia

321 Venezuela

331 Guyana; British Guiana

332 Surinam; Dutch Guiana; Netherlands Guiana

333 French Guiana

341 Brazil

345 Ecuador; Galapagos Islands

351 Peru

355 Bolivia

361 Chile

365 Argentina

371 Paraguay

375 Uruguay

380 Other South American islands

381 Falkland Islands

EUROPE

Europe, NOS (See code **499**.)

400 United Kingdom, NOS; Great Britain, NOS

401 England; Channel Islands; Guernsey; Isle of Man; Jersey

402 Wales

403 Scotland; Orkney Islands; Shetland Islands

404 Northern Ireland; Ulster

410 Ireland, NOS; Eire; Republic of Ireland

420 Scandinavia, NOS; Lapland, NOS

421 Iceland

423 Norway; Jan Mayen; Svalbard

425 Denmark; Faeroe (Faroe) Islands

427 Sweden

429 Finland

430 Germanic countries, NOS

431 Germany (East and West); Bavaria; Federal Republic of Germany; German Democratic Republic

432 Netherlands; Holland

433 Belgium

434 Luxembourg

435 Switzerland

436 Austria

437 Liechtenstein

440 Romance-language countries, NOS

441 France; Corsica; Monaco

443 Spain; Andorra; Balearic Islands; Canary Islands

445 Portugal; Azores; Cape Verde Islands; Madeira Islands

447 Italy; Holy See; San Marino; Sardinia; Sicily; Vatican City

449 Romania (Rumania); Dobruja; Romanian Moldavia; Transylvania; Wallachia

450 Slavic countries, NOS

451 Poland

452 former Czechoslovakia region; Bohemia; Czech Republic; Moravia; Slovak Republic; Slovakia

453 former Yugoslavia region; Bosnia-Herzogovina; Croatia; Dalmatia; Macedonia; Montenegro; Serbia; Slavonia; Slovenia

454 Bulgaria

455 Russia, NOS; former Russian Federation S.F.S.R.; former U.S.S.R., NOS

456 Moldavia, NOS; Ukraine; Bessarabia; former Moldavian S.S.R.; former Ukrainian S.S.R.; former U.S.S.R. Moldavia

457 Belarus; former Byelorussian S.S.R.; White Russia

458 Estonia; former Estonian S.S.R.

459 Latvia; former Latvian S.S.R.

461 Lithuania; former Lithuanian S.S.R.

463 Baltic Republic(s), NOS; Baltic State(s), NOS

470 Other mainland Europe, NOS

471 Crete; Greece

475 Hungary

481 Albania

485 Gibraltar

490 Other Mediterranean islands, NOS

491 Malta

495 Cyprus

499 Europe, NOS; Central Europe, NOS; Eastern Europe, NOS; Northern Europe, NOS; Southern Europe, NOS; Western Europe, NOS

AFRICA

500 Africa, NOS; Central Africa, NOS; Equatorial Africa, NOS

510 North Africa, NOS

511 Morocco

513 Algeria

515 Tunisia

517 Libya; Cyrenaica; Tripoli; Tripolitania

519 Egypt; United Arab Republic

520 Sudanese countries

Anglo-Egyptian Sudan; Burkina Faso; Chad; Mali; Mauritania; Niger; Spanish Sahara; Sudan; Western Sahara; Upper Volta

530 West Africa, NOS; French West Africa, NOS

531 Nigeria

539 Other West African countries

Benin; Bioko; Cameroon (Kameroon); Central African Republic; Congo, NOS; Congo-Brazzaville; Cote d'Ivoire (Ivory Coast); Dahomey; Equatorial Guinea; Fernando Po; French Congo; French Equatorial Africa; Gabon; Gambia; Ghana; Guinea, NOS; Guinea-Bissau; Liberia; Portuguese Guinea; Rio Muni; Senegal; Sierra Leone; Spanish Guinea; Togo

540 South Africa, NOS

541 Zaire; Belgian Congo; Congo-Kinshasa; Congo-Leopoldville

543 Angola; Cabinda; Principe; Sao Tome

545 Republic of South Africa; Basutoland; Bechuanaland; Bophuthatswana; Botswana; Cape Colony; Ciskei; Free State; Lesotho; Namibia; Natal; Orange Free State; South West Africa; Swaziland; Transkei; Transvaal; Union of South Africa; Venda

547 Zimbabwe; Rhodesia, NOS; Southern Rhodesia

549 Zambia; Northern Rhodesia

551 Malawi; Nyasaland

553 Mozambique

555 Madagascar; Malagasy Republic

570 East Africa, NOS

571 Tanzania; Tanganyika; Tanzanyika; Zanzibar

573 Uganda

575 Kenya

577 Rwanda (Ruanda)

579 Burundi; Urundi

581 Somalia; Somali Republic; Somaliland, NOS

583 Djibouti; French Somaliland; French Territory of the Afars and Issas

585 Ethiopia; Abyssinia; Eritrea

580 African Coastal islands, NOS

Comoros; Mauritius; Mayotte; Reunion; St. Helena; Seychelles

ASIA

600 Asia, NOS

610 Near East, NOS; Mesopotamia, NOS
611 Turkey; Anatolia; Asia Minor, NOS; Turkish Armenia

620 Asian Arab countries, NOS; Iraq-Saudi Arabia Neutral Zone; Middle East, NOS
621 Syria
623 Lebanon
625 Jordan; former Arab Palestine; Transjordan
627 Iraq
629 Arabian Peninsula; Aden; Arabia, NOS; Bahrain; Kuwait; Muscat; Oman; People's Democratic Republic of Yemen; Persian Gulf States, NOS; Qatar; Saudi Arabia; Southern Yemen; Trucial States; United Arab Emirates; Yemen
631 Israel and former Jewish Palestine; Gaza; Palestine, NOS; Palestinian National Authority (PNA); West Bank
633 Caucasian Republics of the former U.S.S.R.; Armenia; Azerbaijan; Azerbaizhan (Azerbaidzhan) S.S.R.; Georgia; Nagorno-Karabakh
634 other Asian Republics of the former U.S.S.R.; Kazakh S.S.R.; Kazakhstan; Kirghiz S.S.R.; Kyrgystan; Kyrgyz; Tadzhik S.S.R.; Tajikistan; Turkmen S.S.R.; Turkmenistan; Uzbek S.S.R.; Uzbekistan
637 Iran; Persia
638 Afghanistan
639 Pakistan, NOS; West Pakistan

640 Mid-East Asia, NOS; Maldives
641 India; Andaman Islands
643 Bhutan; Nepal; Sikkim
645 Bangladesh; East Pakistan
647 Sri Lanka; Ceylon
649 Myanmar; Burma

650 Southeast Asia, NOS
651 Thailand; Siam

660 Indochina, NOS
661 Laos
663 Cambodia; Kampuchea
665 Vietnam; Annam; Cochin China; Tonkin
671 Malay Peninsula; Brunei; Malaysia; North Borneo; Singapore
673 Indonesia; Borneo, NOS; Dutch East Indies; Java; New Guinea, NOS; Sumatra
675 Philippines; Philippine Islands

680 East Asia, NOS
681 China, NOS
682 People's Republic of China
683 Hong Kong
684 Taiwan; Formosa; Republic of China
685 Tibet
686 Macao (Macau)
691 Mongolia
693 Japan; Okinawa
695 Korea (North and South)

AUSTRALIA and OCEANIA

711 **Australia, NOS**;
Australian New Guinea; Cartier Islands; Cocos (Keeling) Islands; Norfolk Islands; Northeast New Guinea; Papua New Guinea

715 **New Zealand**; Niue

720 **Pacific Islands, NOS*; Oceania, NOS*; Polynesia, NOS***

721 Melanesian Islands*; Fiji; Futuna Islands; Melanesia; New Hebrides; Solomon Islands; Vanuatu; Wallis Islands

723 Micronesian Islands*; Christmas Island; Micronesia*; Nauru

725 Polynesian Islands*; French Polynesia; New Caledonia; Pitcairn; Tonga; Western Samoa

750 **Antarctica**

***** Except possessions of the U.S. -- See codes **120 - 139** for these.

"PLACE OF DEATH" FOR LIVING PATIENTS

997 Use this code in the "Place of Death" field when the patient was alive as of the Date of Last Contact.

PLACE OF BIRTH/DEATH UNKNOWN

998 **Not U.S., NOS**
(Birth or death place is stated to be *not* in the United States, but no other information is available.)

999 **Place of birth/death completely unknown**

BIRTHPLACE and PLACE OF DEATH codes -- *alphabetical list*

A

224 AB (Alberta)
585 Abyssinia
629 Aden
583 Afars and Issas (French Territory)
638 Afghanistan
500 Africa
500 Africa, Central
570 Africa, East
500 Africa, Equatorial, NOS
539 Africa, French Equatorial
510 Africa, North
540 Africa, South, NOS
545 Africa, South, Republic of
545 Africa, South, Union of
545 Africa, South West
530 Africa, West
530 Africa, West, French
580 African Coastal islands, NOS
539 African Republic, Central
091 AK (Alaska)
037 AL (Alabama)
037 Alabama
091 Alaska
481 Albania
224 Alberta
513 Algeria
250 America, Central
260 America, North
300 America, South
121 American Samoa
611 Anatolia
641 Andaman Islands
443 Andorra
520 Anglo-Egyptian Sudan
543 Angola
245 Anguilla
665 Annam
750 Antarctica
245 Antigua
245 Antilles, Netherlands
245 Antilles, NOS
071 AR (Arkansas)
620 Arab countries, Asian
629 Arab Emirates, United
625 Arab Palestine, former
519 Arab Republic, United (Egypt)
629 Arabia
629 Arabia, Saudi
629 Arabian Peninsula
365 Argentina
087 Arizona
071 Arkansas
633 Armenia (former U.S.S.R.)
611 Armenia, Turkish
245 Aruba
121 AS (American Samoa)
680 Asia, East
640 Asia, Mid-East
610 Asia, Near East
600 Asia, NOS
650 Asia, Southeast
611 Asia Minor
620 Asian Arab countries
634 Asian Republics of the former U.S.S.R., other
109 Atlantic/Caribbean area, other U.S. possessions
100 Atlantic/Caribbean area, U.S. possessions
711 Australia
711 Australian New Guinea
436 Austria
087 AZ (Arizona)
633 Azerbaidzhan S.S.R.
633 Azerbaijan
633 Azerbaizhan S.S.R.
445 Azores

B

247 Bahamas
629 Bahrain
443 Balearic Islands
463 Baltic Republic(s)
463 Baltic State(s)
645 Bangladesh
631 Bank, West
245 Barbados
245 Barbuda
545 Basutoland
431 Bavaria
226 BC (British Columbia)
545 Bechuanaland
457 Belarus
139 Belau
541 Belgian Congo
433 Belgium
252 Belize
539 Benin
246 Bermuda
456 Bessarabia
643 Bhutan
539 Bioko
452 Bohemia

355 Bolivia
545 Bophuthatswana
671 Borneo, North
673 Borneo, NOS
453 Bosnia-Herzogovina
545 Botswana
341 Brazil
226 British Columbia
331 British Guiana
252 British Honduras
245 British Virgin Islands
245 British West Indies, NOS
671 Brunei
454 Bulgaria
520 Burkina Faso
649 Burma
579 Burundi
457 Byelorussian S.S.R.

C

097 CA (California)
543 Cabinda
245 Caicos Islands
097 California
663 Cambodia
539 Cameroon
220 Canada
110 Canal Zone
443 Canary Islands
122 Canton and Enderbury Islands
545 Cape Colony
445 Cape Verde Islands
245 Caribbean, NOS
245 Caribbean islands, other
123 Caroline Islands
711 Cartier Islands
633 Caucasian Republics of the former U.S.S.R.
245 Cayman Islands
500 Central Africa
539 Central African Republic
250 Central America
499 Central Europe
060 Central Midwest U.S.
647 Ceylon
520 Chad
401 Channel Islands (British)
361 Chile
665 China, Cochin
681 China, NOS
682 China, People's Republic of
684 China, Republic of
723 Christmas Island
545 Ciskei
083 CO (Colorado)
665 Cochin China
711 Cocos Islands
311 Colombia
083 Colorado
580 Comoros
226 Columbia, British
022 Columbia, District of
541 Congo, Belgian
539 Congo, French
539 Congo, NOS
539 Congo-Brazzaville
541 Congo-Kinshasa
541 Congo-Leopoldville
007 Connecticut
124 Cook Islands
441 Corsica
256 Costa Rica
539 Cote d'Ivoire
471 Crete
453 Croatia
007 CT (Connecticut)
241 Cuba
245 Curacao
495 Cyprus
517 Cyrenaica
452 Czech Republic
452 Czechoslovakia

D

539 Dahomey
453 Dalmatia
022 DC (District of Columbia)
017 DE (Delaware)
017 Delaware
431 Democratic Republic, German
425 Denmark
022 District of Columbia
583 Djibouti
449 Dobruja
245 Dominica
243 Dominican Republic
673 Dutch East Indies
332 Dutch Guiana

E

570 East Africa
680 East Asia
431 East Germany
673 East Indies, Dutch
645 East Pakistan
499 Eastern Europe
345 Ecuador
519 Egypt
410 Eire
254 El Salvador
125 Ellice Islands
122 Enderbury Islands, Canton and
401 England
539 Equatorial Africa, French
500 Equatorial Africa, NOS
539 Equatorial Guinea
585 Eritrea

458 Estonia
458 Estonian S.S.R.
585 Ethiopia
499 Europe
499 Europe, Central
499 Europe, Eastern
499 Europe, Northern
470 Europe, other mainland
499 Europe, Southern
499 Europe, Western

F

425 Faeroe Islands
381 Falkland Islands
425 Faroe Islands
431 Federal Republic of Germany
123 Federated States of Micronesia, U.S. possession
539 Fernando Po
721 Fiji
429 Finland
035 FL (Florida)
035 Florida
123 FM (Federated States of Micronesia, U.S. possession)
684 Formosa
441 France
545 Free State (Orange)
539 French Congo
539 French Equatorial Africa
333 French Guiana
725 French Polynesia
583 French Somaliland
583 French Territory of the Afars and Issas
530 French West Africa
245 French West Indies
721 Futuna Islands

G

033 GA (Georgia, U.S.)
539 Gabon
345 Galapagos Islands
539 Gambia
631 Gaza
033 Georgia (U.S.)
633 Georgia (former U.S.S.R.)
431 German Democratic Republic
430 Germanic countries
431 Germany
431 Germany, East
431 Germany, Federal Republic of
431 Germany, West
539 Ghana
485 Gibraltar
122 Gilbert Islands
400 Great Britain
471 Greece
210 Greenland
245 Grenada
245 Grenadines
126 GU (Guam)
245 Guadeloupe
126 Guam
251 Guatemala
401 Guernsey
331 Guiana, British
332 Guiana, Dutch
333 Guiana, French
332 Guiana, Netherlands
539 Guinea
539 Guinea-Bissau
539 Guinea, Equatorial
539 Guinea, Portuguese
539 Guinea, Spanish
331 Guyana

H

242 Haiti
099 Hawaii
099 HI (Hawaii)
432 Holland
447 Holy See
252 Honduras, British
253 Honduras, NOS
683 Hong Kong
475 Hungary

I

053 IA (Iowa)
421 Iceland
081 ID (Idaho)
081 Idaho
061 IL (Illinois)
061 Illinois
045 IN (Indiana)
641 India
045 Indiana
673 Indies, Dutch East
660 Indochina
673 Indonesia
053 Iowa
637 Iran
627 Iraq
620 Iraq-Saudi Arabia Neutral Zone
404 Ireland, Northern
410 Ireland, NOS
410 Ireland, Republic of
583 Issas, Afars and
401 Isle of Man
631 Israel
583 Issas
447 Italy
539 Ivory Coast

J

244 Jamaica
423 Jan Mayen
693 Japan

673 Java
401 Jersey
631 Jewish Palestine (former)
127 Johnston Atoll
625 Jordan
453 Jugoslavia

K

539 Kameroon
663 Kampuchea
065 Kansas
634 Kazakh S.S.R.
634 Kazakhstan
711 Keeling Islands
047 Kentucky
575 Kenya
634 Kirghiz S.S.R.
122 Kiribati
695 Korea
695 Korea, North
695 Korea, South
065 KS (Kansas)
629 Kuwait
047 KY (Kentucky)
634 Kyrgystan
634 Kyrgyz

L

073 LA (Louisiana)
221 Labrador
661 Laos
420 Lapland
265 Latin America, NOS
459 Latvia
459 Latvian S.S.R.
623 Lebanon
245 Leeward Islands, NOS
545 Lesotho
539 Liberia
517 Libya
437 Liechtenstein
122 Line Islands, Southern
461 Lithuania
461 Lithuanian S.S.R.
073 Louisiana
434 Luxembourg

M

005 MA (Massachusetts)
686 Macao
686 Macau
453 Macedonia
555 Madagascar
445 Madeira Islands
002 Maine
470 Mainland Europe, other
555 Malagasy Republic
551 Malawi
671 Malay Peninsula
671 Malaysia
640 Maldives
520 Mali
491 Malta
224 Manitoba
129 Mariana Islands, Northern
221 Maritime provinces
131 Marshall Islands
245 Martinique
021 Maryland
005 Massachusetts
520 Mauritania
580 Mauritius
580 Mayotte
224 MB (Manitoba)
021 MD (Maryland)
002 ME (Maine)
490 Mediterranean islands, other
721 Melanesia
721 Melanesian Islands (except U.S. possessions, codes 120-139)
610 Mesopotamia
230 Mexico
131 MH (Marshall Islands)
041 MI (Michigan)
041 Michigan
723 Micronesia (except U.S. possessions, codes 120-139)
123 Micronesia, Federated States of (U.S. possession)
723 Micronesian Islands (except U.S. possessions, codes 120-139)
640 Mid-East Asia
620 Middle East, NOS
132 Midway Islands
060 Midwest U.S., Central
050 Midwest U.S., Northern
070 Midwest U.S., Southern
052 Minnesota
249 Miquelon
039 Mississippi
063 Missouri
052 MN (Minnesota)
063 MO (Missouri)
456 Moldavia, former U.S.S.R.
456 Moldavia, NOS
449 Moldavia, Romanian
456 Moldavian S.S.R.
456 Moldova
441 Monaco
691 Mongolia
056 Montana
453 Montenegro
245 Montserrat
452 Moravia
511 Morocco

080 Mountain states, U.S.
553 Mozambique
129 MP (Northern Mariana Islands)
039 MS (Mississippi)
056 MT (Montana)
629 Muscat, Oman and
649 Myanmar

N

633 Nagorno-Karabakh
545 Namibia
133 Nampo-Shoto, Southern
545 Natal
723 Nauru
221 NB (New Brunswick)
025 NC (North Carolina)
054 ND (North Dakota)
067 NE (Nebraska)
610 Near East
067 Nebraska
643 Nepal
432 Netherlands
245 Netherlands Antilles
332 Netherlands Guiana
620 Neutral Zone, Iraq-Saudi Arabia
085 Nevada
245 Nevis
221 New Brunswick
725 New Caledonia
001 New England
711 New Guinea, Australian
711 New Guinea, Northeast
673 New Guinea, NOS
711 New Guinea, Papua
003 New Hampshire
721 New Hebrides
008 New Jersey
086 New Mexico
011 New York
715 New Zealand
221 Newfoundland
221 NF (Newfoundland)
003 NH (New Hampshire)
255 Nicaragua
520 Niger
531 Nigeria
715 Niue
008 NJ (New Jersey)
086 NM (New Mexico)
711 Norfolk Islands
510 North Africa
260 North America
240 North American islands, NOS
671 North Borneo
025 North Carolina
040 North Central U.S.
054 North Dakota
695 North Korea
010 North Mid-Atlantic U.S.
711 Northeast New Guinea
001 Northeast U.S.
499 Northern Europe
404 Northern Ireland
129 Northern Mariana Islands
050 Northern Midwest U.S.
549 Northern Rhodesia
225 Northwest Territories
423 Norway
998 Not United States, NOS
221 Nova Scotia
221 NS (Nova Scotia)
225 NT (Northwest Territories)
225 NU (Nunavut)
225 Nunavut
085 NV (Nevada)
011 NY (New York)
551 Nyasaland

O

720 Oceania (except U.S. possessions, codes 120-139)
043 OH (Ohio)
043 Ohio
075 OK (Oklahoma)
693 Okinawa
075 Oklahoma
629 Oman and Muscat
223 ON (Ontario)
223 Ontario
095 OR (Oregon)
545 Orange Free State
095 Oregon
403 Orkney Islands

P

014 PA (Pennsylvania)
120 Pacific area, U.S. possessions
090 Pacific Coast U.S.
720 Pacific islands, NOS (except U.S. possessions, codes 120-139)
123 Pacific islands, Trust Territory of the
645 Pakistan, East
639 Pakistan, NOS
639 Pakistan, West
139 Palau
625 Palestine, Arab (former)
631 Palestine, Jewish (former)
631 Palestine National Authority
631 Palestine, NOS
257 Panama
711 Papua New Guinea
371 Paraguay

221 PE (Prince Edward Island)
014 Pennsylvania
629 People's Democratic Republic of Yemen
682 People's Republic of China
637 Persia
629 Persian Gulf States, NOS
351 Peru
675 Philippine Islands
675 Philippines
122 Phoenix Islands
725 Pitcairn
631 PNA (Palestine National Authority)
451 Poland
725 Polynesia, French
720 Polynesia, NOS (except U.S. possessions, codes 120-139)
725 Polynesian islands (except U.S. possessions, codes 120-139)
445 Portugal
539 Portuguese Guinea
101 PR (Puerto Rico)
224 Prairie provinces
221 Prince Edward Island
543 Principe
101 Puerto Rico
139 PW (Palau)

Q

629 Qatar
222 QC (Quebec)
222 Quebec

R

684 Republic of China
682 Republic of China, People's
410 Republic of Ireland
545 Republic of South Africa
629 Republic of Yemen, People's Democratic
580 Reunion
006 Rhode Island
549 Rhodesia, Northern
547 Rhodesia, NOS
547 Rhodesia, Southern
006 RI (Rhode Island)
539 Rio Muni
440 Romance-language countries
449 Romania
449 Romanian Moldavia
577 Ruanda
449 Rumania
455 Russia, NOS
457 Russia, White
455 Russian Federation, former U.S.S.R.
445 Russian S.F.S.R.
577 Rwanda
134 Ryukyu Islands

S

520 Sahara, Spanish
520 Sahara, Western
245 St. Christopher-Nevis
580 St. Helena
245 St. Kitts
245 St. Lucia
249 St. Pierre
245 St. Vincent
121 Samoa, American
725 Samoa, Western
447 San Marino
543 Sao Tome
447 Sardinia
224 Saskatchewan
629 Saudi Arabia
026 SC (South Carolina)
420 Scandinavia
403 Scotland
055 SD (South Dakota)
539 Senegal
453 Serbia
580 Seychelles
403 Shetland Islands
651 Siam
447 Sicily
539 Sierra Leone
643 Sikkim
671 Singapore
224 SK (Saskatchewan)
450 Slavic countries
453 Slavonia
452 Slovak Republic
452 Slovakia
453 Slovenia
721 Solomon Islands
581 Somali Republic
581 Somalia
583 Somaliland, French
581 Somaliland, NOS
540 South Africa, NOS
545 South Africa, Republic of
545 South Africa, Union of
300 South America
380 South American islands
026 South Carolina
055 South Dakota
695 South Korea
020 South Mid-Atlantic U.S.
545 South West Africa
650 Southeast Asia
030 Southeastern U.S.
499 Southern Europe
122 Southern Line Islands

070 Southern Midwest U.S.
133 Southern Nampo-Shoto
547 Southern Rhodesia
629 Southern Yemen
- - - Soviet Union, former (See individual republics.)
443 Spain
539 Spanish Guinea
520 Spanish Sahara
647 Sri Lanka
- - - St.____: listed as if "Saint____"
520 Sudan
520 Sudan, Anglo-Egyptian
520 Sudanese countries
673 Sumatra
332 Surinam
423 Svalbard
135 Swan Islands
545 Swaziland
427 Sweden
435 Switzerland
621 Syria

T

634 Tadzhik S.S.R.
684 Taiwan
634 Tajikistan
571 Tanganyika
571 Tanzania
571 Tanzanyika
031 Tennessee
077 Texas
651 Thailand
685 Tibet
031 TN (Tennessee)
245 Tobago
539 Togo
136 Tokelau Islands
725 Tonga
665 Tonkin
625 Transjordan
545 Transkei
545 Transvaal
449 Transylvania
245 Trinidad
517 Tripoli
517 Tripolitania
629 Trucial States
- - - Trust Territory of Pacific Islands (U.S. possessions): See individual island groups (codes 123, 129, 131 and 139).
515 Tunisia
611 Turkey
611 Turkish Armenia
634 Turkmen S.S.R.
634 Turkmenistan
245 Turks Islands
125 Tuvalu
077 TX (Texas)

U

573 Uganda
456 Ukraine
456 Ukrainian S.S.R.
404 Ulster
545 Union of South Africa
- - - Union of Soviet Socialist Republics (U.S.S.R., former) (See individual republics.)
629 United Arab Emirates
519 United Arab Republic
400 United Kingdom
000 United States
999 Unknown (completely)
520 Upper Volta
375 Uruguay
579 Urundi
000 U.S.
060 U.S., Central Midwest
080 U.S., Mountain States
040 U.S., North Central
010 U.S., North Mid-Atlantic
001 U.S., Northeastern
050 U.S., Northern Midwest
090 U.S., Pacific Coast
020 U.S., South Mid-Atlantic
030 U.S., Southeastern
070 U.S., Southern Midwest
102 U.S. Virgin Islands
456 U.S.S.R. Moldavia, former
084 UT (Utah)
084 Utah
634 Uzbek S.S.R.
634 Uzbekistan

V

023 VA (Virginia)
721 Vanuatu
447 Vatican City
545 Venda
321 Venezuela
004 Vermont

102 VI (Virgin Islands, U.S.)
665 Vietnam
245 Virgin Islands, British
102 Virgin Islands (U.S.)
023 Virginia
520 Volta, Upper
004 VT (Vermont)

W

093 WA (Washington, state)
137 Wake Island
402 Wales
449 Wallachia
721 Wallis Islands
093 Washington (state)
022 Washington, D.C.
530 West Africa, French
530 West Africa, NOS
545 West Africa, South
539 West African countries, other
631 West Bank
431 West Germany
245 West Indies
245 West Indies, British
245 West Indies, French
639 West Pakistan
024 West Virginia
499 Western Europe
520 Western Sahara
725 Western Samoa
457 White Russia
051 WI (Wisconsin)
245 Windward Islands, NOS
051 Wisconsin
024 WV (West Virginia)
082 WY (Wyoming)
082 Wyoming

Y

629 Yemen
629 Yemen, People's Democratic Republic of
629 Yemen, Southern
225 YT (Yukon Territory)
453 Yugoslavia
225 Yukon Territory

Z

541 Zaire
549 Zambia
571 Zanzibar
547 Zimbabwe

Appendix B

Paired Organ Sites

PAIRED ORGAN SITES -- *numerical list*

ICD-O-3	SITE
C07.9	Parotid gland
C08.0	Submandibular gland
C08.1	Sublingual gland
C09.0	Tonsillar fossa
C09.1	Tonsillar pillar
C09.8	Overlapping lesion of tonsil
C09.9	Tonsil, NOS
C30.0	Nasal cavity (excluding nasal cartilage and nasal septum)
C30.1	Middle ear
C31.0	Maxillary sinus
C31.2	Frontal sinus
C34.0	Main bronchus (excluding carina)
C34.1-C34.9	Lung
C38.4	Pleura, NOS
C40.0	Long bones of upper limb, scapula and associated joints
C40.1	Short bones of upper limb and associated joints
C40.2	Long bones of lower limb and associated joints
C40.3	Short bones of lower limb and associated joints
C41.3	Rib, clavicle and associated joints (excluding sternum)
C41.4	Pelvic bones and associated joints (excluding sacrum, coccyx and symphysis pubis)
C44.1	Skin of eyelid
C44.2	Skin of external ear
C44.3	Skin of other and unspecified parts of face (midline code "9")
C44.5	Skin of trunk (midline code "9")
C44.6	Skin of upper limb and shoulder
C44.7	Skin of lower limb and hip
C47.1	Peripheral nerves and autonomic nervous system of upper limb and shoulder
C47.2	Peripheral nerves and autonomic nervous system of lower limb and hip
C49.1	Connective, subcutaneous, and other soft tissues of upper limb and shoulder
C49.2	Connective, subcutaneous, and other soft tissues of lower limb and hip
C50.0-C50.9	Breast
C56.9	Ovary
C57.0	Fallopian tube
C62.0-C62.9	Testis
C63.0	Epididymis
C63.1	Spermatic cord
C64.9	Kidney, NOS
C65.9	Renal pelvis
C66.9	Ureter
C69.0-C69.9	Eye and adnexa
C74.0-C74.9	Adrenal gland
C75.4	Carotid body

PAIRED ORGAN SITES -- *alphabetical list*

ICD-O-3	SITE
C74.0-C74.9	Adrenal gland
C50.0-C50.9	Breast
C75.4	Carotid body
C49.2	Connective, subcutaneous, and other soft tissues of lower limb and hip
C49.1	Connective, subcutaneous, and other soft tissues of upper limb and shoulder
C63.0	Epididymis
C69.0-C69.9	Eye and adnexa
C57.0	Fallopian tube
C31.2	Frontal sinus
C64.9	Kidney, NOS
C40.2	Long bones of lower limb and associated joints
C40.0	Long bones of upper limb, scapula and associated joints
C34.1-C34.9	Lung
C34.0	Main bronchus (excluding carina)
C31.0	Maxillary sinus
C30.1	Middle ear
C30.0	Nasal cavity (excluding nasal cartilage and nasal septum)
C56.9	Ovary
C07.9	Parotid gland
C41.4	Pelvic bones and associated joints (excluding sacrum, coccyx and symphysis pubis)
C47.2	Peripheral nerves and autonomic nervous system of lower limb and hip
C47.1	Peripheral nerves and autonomic nervous system of upper limb and shoulder
C38.4	Pleura, NOS
C65.9	Renal pelvis
C41.3	Rib, clavicle and associated joints (excluding sternum)
C40.3	Short bones of lower limb and associated joints
C40.1	Short bones of upper limb and associated joints
C44.2	Skin of external ear
C44.1	Skin of eyelid
C44.7	Skin of lower limb and hip
C44.3	Skin of other and unspecified parts of face (midline code "9")
C44.5	Skin of trunk (midline code "9")
C44.6	Skin of upper limb and shoulder
C63.1	Spermatic cord
C08.1	Sublingual gland
C08.0	Submandibular gland
C62.0-C62.9	Testis
C09.9	Tonsil, NOS
C09.8	Tonsil, overlapping lesion of
C09.0	Tonsillar fossa
C09.1	Tonsillar pillar
C66.9	Ureter

Appendix C

Common Acceptable Abbreviations

sources: California Cancer Registry, Florida Cancer Data System, *ICD-O-3*, *Merriam-Webster's Medical Desk Dictionary*

Common Acceptable Abbreviations

(in order of term)

Abdomen	ABD
Abdominal Perineal	AP
Abelson Murine Leukemia Oncogene	ABL
Above Knee (Amputation)	AK(A)
Acid Phosphatase	ACID PHOS
Acquired Immune Deficiency Syndrome	AIDS
Acute Granulocytic Leukemia	AGL
Acute Lymphocytic Leukemia	ALL
Acute Myeloid Leukemia	AML
Adenocarcinoma	ADENOCA
Adjacent	ADJ
Admission; Admit	ADM
Against Medical Advice	AMA
AIDS Related Complex/Condition	ARC
Alcohol	ETOH
Alkaline Phosphatase	ALK PHOS
Alpha-fetoprotein	AFP
Also Known As	AKA
Ambulatory	AMB
Anal Intraepithelial Neoplasia	AIN
Anaplastic	ANAP
Angiography	ANGIO
Angioimmunoblastic Lymphadenopathy	AIL
Angioimmunoblastic Lymphadenopathy with Dysproteinemia	AILD
Anterior	ANT
Anteroposterior	AP
Appendix	APP
Approximately	APPROX
Arteriovenous	AV
Aspiration	ASP
Auscultation and Percussion	A&P
Autopsy	AUT
Axilla(ry)	AX
B-cell Chronic Lymphocytic Leukemia	BCLL
Bacillus Calmette-Guerin	BCG
Barium	BA
Barium Enema	BE
Bartholin, Urethral, & Skene Glands	BUS
Breakpoint Cluster Region	BCR
Below Knee (Amputation)	BK(A)
Benign Prostatic Hypertrophy/Hyperplasia	BPH
Bilateral	BIL
Bilateral Salpingo-oophorectomy	BSO
Bile Duct	BD
Biological Response Modifier	BRM
Biopsy	BX
Blood Urea Nitrogen	BUN
Bone Marrow	BM
Bone Scan	BSC
Bowel Movement	BM
Bowel Sounds	BS
Breath Sounds	BS, BRS
Bright Red Blood	BRB
Bright Red Blood (per Rectum)	BRB(PR)
Bronchial-Associated Lymphoid Tissue	BALT
Burkitt type Acute Lymphoblastic Leukemia	B-ALL
Calcium	CA
Carcinoembryonic Antigen	CEA
Carcinoma	CA
Carcinoma *in Situ*	CIS
Carcinoma Showing Thymus-Like Element	CASTLE
CAT Scan	CT, CT SC
Centimeter	CM
Central Nervous System	CNS
Central Primitive Neuroectodermal Tumor	CPNET

Cerebrospinal Fluid	CSF
Cervical Intraepithelial Neoplasia	CIN
Cervical Vertebra	C1-C7
Cervix	CX
Cesium	CS
Chemotherapy	CHEMO
Chest X-Ray	CXR
Chief Complaint	CC
Chronic Granulocytic Leukemia	CGL
Chronic Lymphocytic Leukemia	CLL
Chronic Myeloid Leukemia	CML
Cigarettes	CIG
Clear	CLR
Cluster of Differentiation	CD
Colon	
Ascending	A-COLON
Descending	D-COLON
Sigmoid	S-COLON
Transverse	T-COLON
Common Acute Lymphocytic Leukemia	C-ALL
Common Bile Duct	CBD
Complaining Of	C/O
Complete Blood Count	CBC
Computerized Axial Tomography Scan	CT, CAT SCAN
Consistent With	C/W
Continue	CONT
Core Binding Factor	CBF
Costal Margin	CM
Cubic Centimeter	CC
Cystoscopy	CYSTO
Cytology	CYTO
Cytomegalovirus	CMV
Date of Birth	DOB
Dead on Arrival	DOA
Decreased	DECR (or <)
Dermatology	DERM
Diagnosis	DX
Diameter	DIAM
Differentiated	DIFF
Dilation (Dilatation) and Curettage	D&C
Discharge	DIS, DISCH, DS
Discontinued	DC
Disease	DZ, DIS
Doctor	DR, MD
Ductal Carcinoma *in Situ*	DCIS
Ductal Intraepithelial Neoplasia	DIN
Ear(s), Nose, and Throat	ENT
Eight; Twenty-One (8;21)	ETO
Electroencephalogram	EEG
Electromyogram	EMG
Emergency Room	ER
Endoscopic Retrograde	ENDO
Endoscopic Retrograde Cholangiopancreatography	ERCP
Enlarged	ENL
Enterochromaffin	EC
Enterochromaffin-Like	ECL
Esophagogastroduodenoscopy	EGD
Estrogen Receptor (Assay)	ER(A)
Evaluation	EVAL
Examination	EXAM
Examination Under Anesthesia	EUA
Excision	EXC
Exploratory Laparotomy	EXP LAP
Extend	EXT
Extended Care Facility	ECF
Extension	EXT
External	EXT
Extremity	EXT
Eyes, Ears, Nose, and Throat	EENT
Family (Medical) History	F(M)H
Fever Unknown Origin	FUO
Fingerbreadth	FB
Floor Of Mouth	FOM
Follow-Up	FU
Fracture	FX
Frozen Section	FS
Gallbladder	GB
Gastrin cell	G cell
Gastroenterostomy	GE

Gastroesophageal	GE
Gastrointestinal	GI
Gastrointestinal Autonomic Nerve Tumor	GANT
Gastrointestinal Stromal Tumor	GIST
Genitourinary	GU
Grade	GR
Gram	GM
Gynecology	GYN
Head, Eyes, Ears, Nose, Throat	HEENT
Hematocrit	HCT
Hemoglobin	HGB
History	HX
History and Physical	H&P
History Of	HO
History of Present Illness	HPI
Hormone	HORM
Hospital	HOSP
Hour, Hours	HR, HRS
Human Chorionic Gonadotropin	HCG
Human Immunodeficiency Virus	HIV
Human Papilloma Virus	HPV
Human T-Lymophotrophic Virus Type III	HTLV-III
Hysterectomy	HYST
Immunoblastic Lymphadenopathy	IBL
Immunoglobulin	IG
Impression	IMP
Includes, Including	INCL
Increase	INCR (or >)
Inferior Vena Cava	IVC
Infiltrating	INFILT
Inpatient	IP
Intercostal Margin	ICM
Internal Mammary Artery	IMA
Intrathecal	IT
Intravenous	IV
Intravenous Pyelogram	IVP
Iodine	I, IOD
Jugular Venous Distention	JVD
Kidneys, Ureters, Bladder	KUB
Kilogram	KG
Kilovolt	KV
Laparotomy	LAP
Large	LG
Last Menstrual Period	LMP
Lateral	LAT
Left	L, LT
Left Costal Margin	LCM
Left Lower Extremity	LLE
Left Lower Lobe	LLL
Left Lower Quadrant	LLQ
Left Salpingo-oophorectomy	LSO
Left Upper Extremity	LUE
Left Upper Lobe	LUL
Left Upper Quadrant	LUQ
Liter	L
Liver, Kidney, Spleen (Bladder)	LKS(B)
Lobular Carcinoma *in Situ*	LCIS
Local M.D.	LMD
Long-Term Care Facility	LTCF
Lower Extremity	LE
Lower Inner Quadrant	LIQ
Lower Outer Quadrant	LOQ
Lumbar Puncture	LP
Lumbar Vertebra	L1-L5
Lumbosacral	LS
Lymphadenophy-Associated Virus	LAV
Lymph Node(s)	LN, LN'S, LNS
Magnetic Resonance Imaging	MRI
Malignant	MALIG, MAL
Malignant Peripheral Nerve Sheath Tumor	MPNST
Mandible	MAND
Mastectomy	MAST
Maxilla(ry)	MAX
Maximum	MAX
Medical Doctor	DR, MD
Medicine	MED
Metastatic, Metastases	MET, METS
Microscopic	MICRO
Midclavicular Line	MCL

Middle Lobe	ML
Millicurie (hours)	MC(H)
Milligram (hours)	MG(H)
Milliliter	ML
Millimeter	MM
Million Electron Volts	MEV
Minimum	MIN
Moderate	MOD
Moderately Differentiated	MD, MOD DIFF
Modified Radical Mastectomy	MRM
Monoclonal Gammopathy of Undetermined Significance	MGUS
Mucosal-Associated Lymphoid Tissue	MALT
Myosin, Heavy Polypeptide 11	MYH11
Natural Killer	NK
Nausea and Vomiting	N&V
Neck Vein Distention	NVD
Negative	NEG (or -)
Neurology	NEURO
No Evidence of Disease	NED
Normal	NL
No Significant Findings	NSF
Not Applicable	NA
Not Otherwise Specified	NOS
Not Recorded	NR
Obstructed (-ing, ion)	OBST
Operating Room	OR
Operation	OP
Operative Report	OP REPORT
Ounce	OZ
Outpatient	OP
Packs per Day	PPD
Palpated (-able)	PALP
Papanicolaou Smear	PAP
Papillary	PAP
Past Medical History	PMH
Pathology	PATH
Patient	PT
Pelvic Inflammatory Disease	PID
Percussion and Auscultation	P&A
Percutaneous	PERC
Percutaneous Ethanol Injection	PEI
Peripheral Primitive Neuroectodermal Tumor	PPNET
Personal/Primary Medical Doctor	PMD
Photodynamic Therapy	PDT
Physical Examination	PE
Platelets	PLT
Polymerase Chain Reaction	PCR
Poorly Differentiated	PD, POOR DIFF
Positive	POS (or +)
Positron Emission Tomography	PET
Possible	POSS
Posterior	POST
Posteroanterior	PA
Postmortem Examination	POST
Postoperative (-ly)	PO, POSTOP
Postoperative Day	POD
Preoperative (-ly)	PREOP
Present Illness	PI
Primitive Neuroectodermal Tumor	PNET
Prior to Admission	PTA
Probable (-ly)	PROB
Progesterone Receptor (Assay)	PR(A)
Promyelocytic Leukemia	PML
Prostatic Intraepithelial Neoplasia	PIN
Pulmonary	PULM
Pulmonary Artery	PA
Radiation	RAD
Radiation Absorbed Dose	RAD
Radiation Therapy	RT
Radical	RAD
Radioimmunoassay	RIA
Radium	RA
Red Blood Cells	RBC
Refractory Anemia with Excess Blasts	RAEB
Refractory Anemia with Excess Blasts in Transformation	RAEB-T

Refractory Anemia with Ringed Sideroblasts	RARS
Resection	RESEC
Respiratory	RESPIR
Retinoic Acid Receptor, Alpha	RARA
Review of Outside Films	ROF
Review of Outside Slides	ROS
Review of Systems	ROS
Right	R, RT
Right Costal Margin	RCM
Right Lower Extremity	RLE
Right Lower Lobe	RLL
Right Lower Quadrant	RLQ
Right Middle Lobe	RML
Right Salpingo-oophorectomy	RSO
Right Upper Extremity	RUE
Right Upper Lobe	RUL
Right Upper Quadrant	RUQ
Rule(s) Out	RO, R/O
Sacral Vertebra	S1-S5
Salpingo-oophorectomy	SO
Sequential Multiple Analysis (Biochem Profile)	SMA
Serum Glutamic Oxaloacetic Transaminase	SGOT
Serum Glutamic Pyruvic Transaminase	SGPT
Shortness of Breath	SOB
Skilled Nursing Facility	SNF
Skin-Associated Lymphoid Tissue	SALT
Specimen	SPEC
Split Thickness Skin Graft	STSG
Small	SM, SML
Small Bowel	SB, SML BWL
Spindle Epithelial Tumor with Thymus-Like Element	SETTLE
Spine	
Cervical	C-SPINE
Lumbar	L-SPINE
Sacral	S-SPINE
Thoracic	T-SPINE
Squamous	SQ, SQUAM
Squamous Cell Carcinoma	SCC
Status Post	S/P
Subcutaneous	SUB-Q, SUBQ, SQ
Superior Vena Cava	SVC
Surgery, Surgical	SURG
Symptoms	SX
Thoracic	T
Thoracic Vertebra	T1-T12
Total Abdominal Hysterectomy-Bilateral Salpingo-oophorectomy	TAH-BSO
Total Parenteral Nutrition	TPN
Total Vaginal Hysterectomy	TVH
Transitional Cell Carcinoma	TCC
Transurethral Resection	TUR
Transurethral Resection Bladder (Tumor)	TURB(T)
Transurethral Resection Prostate	TURP
Treatment	RX, TX
Tumor Size	TS
Undifferentiated	UNDIFF
Upper Extremity	UE
Upper Gastrointestinal	UGI
Upper Inner Quadrant	UIQ
Upper Outer Quadrant	UOQ
Vagina, Vaginal	VAG
Vaginal Hysterectomy	VAG HYST
Vaginal Intraepithelial Neoplasia	VAIN
Vascular	VASC
Vulvar Intraepithelial Neoplasia	VIN
Well Differentiated	WD, WELL DIFF
White Blood Cells	WBC
With	W/
Within Normal Limits	WNL
Without	W/O
Work-Up	W/U
X-Ray	XR
Year	YR

Symbols

At	@
Comparison	/
Decrease, less than	<
Equals	=
Increase, more than	>
Negative	-
Number (before a numeral)	#
Positive	+
Pounds (after a numeral)	#
Times	X

Common Acceptable Abbreviations

(in order of abbreviation)

ABD	Abdomen
ABL	Abelson Murine Leukemia oncogene
ACID PHOS	Acid Phosphatase
A-COLON	Ascending Colon
ADENOCA	Adenocarcinoma
ADJ	Adjacent
ADM	Admission; Admit
AFP	Alpha-fetoprotein
AGL	Acute Granulocytic Leukemia
AIDS	Acquired Immune Deficiency Syndrome
AIL	Angioimmunoblastic Lymphadenopathy
AILD	Angioimmunoblastic Lymphadenopathy with Dysproteinemia
AIN	Anal Intraepithelial Neoplasia
AK(A)	Above Knee (Amputation)
AKA	Also Known As
ALK PHOS	Alkaline Phosphatase
ALL	Acute Lymphocytic Leukemia
AMA	Against Medical Advice
AMB	Ambulatory
AML	Acute Myeloid Leukemia
ANAP	Anaplastic
ANGIO	Angiography
ANT	Anterior
A&P	Auscultation and Percussion
AP	Abdominal Perineal
AP	Anteroposterior
APP	Appendix
APPROX	Approximately
ARC	AIDS Related Complex/Condition
ASP	Aspiration
AUT	Autopsy
AV	Arteriovenous
AX	Axilla(ry)
BA	Barium
B-ALL	Burkitt type Acute Lymphocytic Leukemia
BALT	Bronchial-Associated Lymphoid Tissue
BCG	Bacillus Calmette-Guerin
BCLL	B-cell Chronic Lymphocytic Leukemia
BCR	Breakpoint Cluster Region
BD	Bile Duct
BE	Barium Enema
BIL	Bilateral
BK(A)	Below Knee (Amputation)
BM	Bone Marrow
BM	Bowel Movement
BPH	Benign Prostatic Hypertrophy/Hyperplasia
BRB	Bright Red Blood
BRB(PR)	Bright Red Blood (per Rectum)
BRM	Biological Response Modifier
BRS	Breath Sounds
BS	Breath Sounds
BS	Bowel Sounds
BSC	Bone Scan
BSO	Bilateral Salpingo-oophorectomy
BUN	Blood Urea Nitrogen
BUS	Bartholin, Urethral, & Skene Glands
BX	Biopsy
C	With
C1-C7	Cervical Vertebra
C-ALL	Common Acute Lymphocytic Leukemia
CA	Calcium
CA	Carcinoma
CASTLE	Carcinoma Showing Thymus-Like Element
CAT SCAN	Computerized Axial Tomography Scan
CBC	Complete Blood Count

CBD	Common Bile Duct
CBF	Core Binding Factor
CC	Chief Complaint
CC	Cubic Centimeter
CD	Cluster of Differentiation
CEA	Carcinoembryonic Antigen
CGL	Chronic Granulocytic Leukemia
CHEMO	Chemotherapy
CIG	Cigarettes
CIN	Cervical Intraepithelial Neoplasia
CIS	Carcinoma In Situ
CLL	Chronic Lymphocytic Leukemia
CLR	Clear
CM	Centimeter
CM	Costal Margin
CML	Chronic Myeloid Leukemia
CMV	Cytomegalovirus
CNS	Central Nervous System
C/O	Complaining Of
CONT	Continue
CPNET	Central Primitive Neuroectodermal Tumor
CS	Cesium
CSF	Cerebrospinal Fluid
C-SPINE	Cervical Spine
CT SCAN	Computerized Axial Tomography Scan
C/W	Consistent With
CX	Cervix
CXR	Chest X-Ray
CYSTO	Cystoscopy
CYTO	Cytology
D&C	Dilatation (Dilation) and Curettage
DC	Discontinued
DCIS	Ductal Carcinoma *in Situ*
D-COLON	Descending Colon
DECR (or <)	Decreased
DERM	Dermatology
DIAM	Diameter
DIFF	Differentiated
DIN	Ductal Intraepithelial Neoplasia
DIS	Disease
DIS	Discharge
DISCH	Discharge
DOA	Dead on Arrival
DOB	Date of Birth
DR	Doctor
DS	Discharge
DX	Diagnosis
DZ	Disease
EC	Enterochromaffin
ECF	Extended Care Facility
ECL	Enterochromaffin-Like
EEG	Electroencephalogram
EENT	Eye(s), Ear(s), Nose, and Throat
EGD	Esophagogastroduodenoscopy
EMG	Electromyogram
ENDO	Endoscopic Retrograde
ENL	Enlarged
ENT	Ear(s), Nose, and Throat
ER	Emergency Room
ER(A)	Estrogen Receptor (Assay)
ERCP	Endoscopic Retrograde Cholangiopancreatography
ETO	Eight; Twenty-One (8;21)
ETOH	Alcohol
EUA	Examination Under Anesthesia
EVAL	Evaluation
EXAM	Examination
EXC	Excision
EXP LAP	Exploratory Laparotomy
EXT	Extend
EXT	Extension
EXT	External
EXT	Extremity
FB	Fingerbreadth
F(M)H	Family (Medical) History
FOM	Floor of Mouth
FS	Frozen Section
FU	Follow-up

FUO	Fever Unknown Origin
FX	Fracture
G cell	Gastrin cell
GANT	Gastrointestinal Autonomic Nerve Tumor
GB	Gallbladder
GE	Gastroenterostomy
GE	Gastroesophageal
GI	Gastrointestinal
GIST	Gastrointestinal Stromal Tumor
GM	Gram
GR	Grade
GU	Genitourinary
GYN	Gynecology
HCG	Human Chorionic Gonadotropin
HCT	Hematocrit
HEENT	Head, Eyes, Ears, Nose, Throat
HGB	Hemoglobin
HIV	Human Immunodeficiency Virus
HO	History of
HORM	Hormone
HOSP	Hospital
H&P	History and Physical
HPI	History of Present Illness
HPV	Human Papilloma Virus
HR	Hour
HRS	Hours
HTLV-III	Human T-Lymophotrophic Virus Type III
HX	History
HYST	Hysterectomy
I	Iodine
IBL	Immunoblastic Lymphadenopathy
ICM	Intercostal Margin
IG	Immunoglobulin
IMA	Internal Mammary Artery
IMP	Impression
INCL	Includes, Including
INCR (or >)	Increase
INFILT	Infiltrating
IOD	Iodine
IP	Inpatient
IT	Intrathecal
IV	Intravenous
IVC	Inferior Vena Cava
IVP	Intravenous Pyelogram
JVD	Jugular Venous Distention
KG	Kilogram
KUB	Kidneys, Ureters, Bladder
KV	Kilovolt
L	Left
L	Liter
L1-L5	Lumbar Vertebra
LAP	Laparotomy
LAT	Lateral
LAV	Lymphadenophy-Associated Virus
LCIS	Lobular Carcinoma *in Situ*
LCM	Left Costal Margin
LE	Lower Extremity
LG	Large
LIQ	Lower Inner Quadrant
LKS(B)	Liver, Kidney, Spleen (Bladder)
LLE	Left Lower Extremity
LLL	Left Lower Lobe
LLQ	Left Lower Quadrant
LMD	Local Medical Doctor
LMP	Last Menstrual Period
LN	Lymph Node
LN'S, LNS	Lymph Nodes
LOQ	Lower Outer Quadrant
LP	Lumbar Puncture
LS	Lumbosacral
LSO	Left Salpingo-oophorectomy
L-SPINE	Lumbar Spine
LT	Left
LTCF	Long-Term Care Facility
LUE	Left Upper Extremity
LUL	Left Upper Lobe
LUQ	Left Upper Quadrant
MAL	Malignant
MALIG	Malignant

MALT	Mucosal-Associated Lymphoid Tissue
MAND	Mandible
MAST	Mastectomy
MAX	Maxilla(ry)
MAX	Maximum
MC(H)	Millicurie(hours)
MCL	Midclavicular Line
MD	Medical Doctor
MD	Moderately differentiated
MED	Medicine
MET	Metastatic
METS	Metastases
MEV	Million Electron Volts
MG(H)	Milligram(hours)
MGUS	Monoclonal Gammopathy of Undetermined Significance
MICRO	Microscopic
MIN	Minimum
ML	Middle Lobe
ML	Milliliter
MM	Millimeter
MOD	Moderate
MOD DIFF	Moderately Differentiated
MPNST	Malignant Peripheral Nerve Sheath Tumor
MRI	Magnetic Resonance Imaging
MRM	Modified Radical Mastectomy
MYH11	Myosin, Heavy Polypeptide 11
NA	Not Applicable
NED	No Evidence of Disease
NEG (or --)	Negative
NEURO	Neurology
NK	Natural Killer
NL	Normal
NOS	Not Otherwise Specified
NR	Not Recorded
NSF	No Significant Findings
N&V	Nausea and Vomiting
NVD	Neck Vein Distention
OBST	Obstructed (-ing, ion)
OP	Operation
OP	Outpatient
OP REPORT	Operative Report
OR	Operating Room
OZ	Ounce
P&A	Percussion and Auscultation
PA	Posteroanterior
PA	Pulmonary Artery
PALP	Palpated (-able)
PAP	Papanicolaou Smear
PAP	Papillary
PATH	Pathology
PCR	Polymerase Chain Reaction
PD	Poorly Differentiated
PDT	Photodynamic Therapy
PE	Physical Examination
PEI	Percutaneous Ethanol Injection
PERC	Percutaneous
PET	Positron Emission Tomography
PI	Present Illness
PID	Pelvic Inflammatory Disease
PIN	Prostatic Intraepithelial Neoplasia
PLT	Platelets
PMD	Personal/Primary Medical Doctor
PMH	Past Medical History
PML	Promyelocytic Leukemia
PNET	Primitive Neuroectodermal Tumor
PO	Postoperative (-ly)
POD	Postoperative Day
POOR DIFF	Poorly Differentiated
POS (or +)	Positive
POSS	Possible
POST	Posterior
POST	Postmortem Examination
POSTOP	Postoperative (-ly)

PPD	Packs per Day
PPNET	Peripheral Primitive Neuroectodermal Tumor
PR(A)	Progesterone Receptor (Assay)
PREOP	Preoperative (-ly)
PROB	Probable (-ly)
PTA	Prior to Admission
PULM	Pulmonary
R	Right
RA	Radium
RAD	Radiation
RAD	Radiation Absorbed Dose
RAD	Radical
RAEB	Refractory Anemia with Excess Blasts
RAEB-T	Refractory Anemia with Excess Blasts in Transformation
RARA	Retinoic Acid Receptor, Alpha
RARS	Refractory Anemia with Ringed Sideroblasts
RBC	Red Blood Cells
RCM	Right Costal Margin
RESEC	Resection
RESPIR	Respiratory
RIA	Radioimmunoassay
RLE	Right Lower Extremity
RLL	Right Lower Lobe
RLQ	Right Lower Quadrant
RML	Right Middle Lobe
RO, R/O	Rule Out
ROF	Review of Outside Films
ROS	Review of Outside Slides
ROS	Review of Systems
RSO	Right Salpingo-oophorectomy
RT	Radiation Therapy
RT	Right
RUE	Right Upper Extremity
RUL	Right Upper Lobe
RUQ	Right Upper Quadrant
RX	Treatment
S1-S5	Sacral Vertebra
SALT	Skin-Associated Lymphoid Tissue
SB	Small Bowel
SCC	Squamous Cell Carcinoma
S-COLON	Sigmoid Colon
SETTLE	Spindle Epithelial Tumor with Thymus-Like Element
SGOT	Serum Glutamic Oxaloacetic Transaminase
SGPT	Serum Glutamic Pyruvic Transaminase
SM	Small
SMA	Sequential Multiple Analysis (Biochem Profile)
SML	Small
SML BWL	Small Bowel
SNF	Skilled Nursing Facility
SO	Salpingo-oophorectomy
SOB	Shortness of Breath
S/P	Status Post
SPEC	Specimen
SQ	Subcutaneous
SQ, SQUAM	Squamous
S-SPINE	Sacral Spine
STSG	Split Thickness Skin Graft
SUB-Q, SUBQ	Subcutaneous
SURG	Surgery, Surgical
SVC	Superior Vena Cava
SX	Symptoms
T	Thoracic
T1-T12	Thoracic Vertebra
TAH-BSO	Total Abdominal Hysterectomy-Bilateral Salpingo-oophorectomy
TCC	Transitional Cell Carcinoma
T-COLON	Transverse Colon
TPN	Total Parenteral Nutrition
TS	Tumor Size
T-SPINE	Thoracic Size
TUR	Transurethral Resection

TURB(T)	Transurethral Resection Bladder (Tumor)
TURP	Transurethral Resection Prostate
TVH	Total Vaginal Hysterectomy
TX	Treatment
UE	Upper Extremity
UGI	Upper Gastrointestinal
UIQ	Upper Inner Quadrant
UNDIFF	Undifferentiated
UOQ	Upper Outer Quadrant
VAG	Vagina, Vaginal
VAG HYST	Vaginal Hysterectomy
VAIN	Vaginal Intraepithelial Neoplasia
VASC	Vascular
VIN	Vulvar Intraepithelial Neoplasia
W/	With
WBC	White Blood Cells
WD	Well Differentiated
WELL DIFF	Well Differentiated
WNL	Within Normal Limits
W/O	Without
W/U	Work-Up
XR	X-Ray
YR	Year

Symbols

@	At
/	Comparison
<	Decrease, less than
=	Equals
>	Increase, more than
-	Negative
#	Number (if before a numeral)
#	Pounds (if after a numeral)
+	Positive
X	Times

SECTION VI - FOLLOW-UP DATA

Date of Last Contact

NAACCR Version 9.1 Item 1750, columns 791-798

Enter the date, in MMDDCCYY format, of last contact with the patient. This is not limited to contact between *your* facility and the patient; for example, if your facility's last contact was in March but you know the patient was seen elsewhere in April, then the April date should be filled in.

If the patient is dead, this field records the date of death.

For hospitals without follow-up registries, the date entered in this field is probably your facility's discharge date.

Follow-up registries are requested to enter the Date of Last Contact learned from follow-up efforts. If no follow-up information has been received by the time the case is abstracted, enter the date discharged from the hospital. Do not use the date that information was received in the mail, nor the date information was requested from a patient, physician or other follow-up source.

If a patient has multiple primaries, all abstracts submitted for the patient should contain the same Date of Last Contact.

Never use the code for unknown year (**9999**), and do not leave this field empty. You may use the unknown codes for month and day if necessary.

Vital Status

NAACCR Version 9.1 Item 1760, column 799

Enter the patient's Vital Status as of the date entered in the "Date of Last Contact" field. Remember that if the patient has died, the Date of Last Contact should contain the date of death. Use the most accurate information available. If a patient has multiple primaries, all records should have the same Vital Status. Use the following codes:

Status	Code
dead	**0**
alive	**1**

Place of Death

NAACCR Version 9.1 Item 1940, columns 889-891

If the patient has died, enter the code for the U.S. state, Canadian province, or country where the death occurred. Use the codes for Birthplace (Appendix A) to complete this field. (The Massachusetts code is **005**.)

If you know that the patient is dead, but you don't know where the death occurred, enter **999**.

If the patient is alive as of the Date of Last Contact, enter **997** -- do not leave this field empty.

Comments / Narrative Remarks

NAACCR Version 9.1 field "Text--Remarks", Item 2680, columns 4797-5146

This is a free text field holding up to 350 characters*. It should be used to communicate any details about a case that would help the MCR staff to understand its particulars. Is there anything especially noteworthy about the case? Clear up anything that you know we might have to question. Tell us anything about the case that you think is important for us to know, and that is not recorded elsewhere in the fields that we collect. Avoid a call from the MCR by using this field!

For example, this field may contain:

- overflow text from other Narrative fields;
- the patient's own cancer history (known primaries dating from before and after the case that you're reporting); multiple primaries being reported simultaneously
- verification of an unusual primary site/histology combination;
- verification of an unusual behavior/histology or behavior/stage combination;
- verification of an unusual age/diagnosis combination;
- verification of an unusual gender/first name combination;
- notes about a diagnosis that was uncertain as to primary site or histology;
- notes about any uncertain dates that you have had to estimate;
- details about the patient's address that might be important to the central registry -- such as whether the patient was homeless or was from a foreign country (tell us the country here); if the only address you had for the patient was a *current* rather than at-diagnosis address, please tell us that here.

Please do NOT record sensitive patient information that does not concern the central registry in this field! For example, information on HIV or AIDS status, alcohol or other drug abuse, mental illness, venereal disease and hepatitis do not belong here. If you wish to record such information on your data system, use a field that is not collected by the MCR.

* For the CIMS Satellite system, the field can contain no more than 200 characters.

SECTION VI - CASE STATUS INFORMATION

Date Case Completed

NAACCR Version 9.1 Item 2090, columns 952-959

Record the date that the case was completed and passed all edits that were applied at the hospital level. The date should be recorded in MMDDCCYY format.

For facilities reporting cases to the MCR on paper abstracts or via the CIMS Satellite system, please fill in the date on which you finished abstracting the case.

Date Case Report Exported

NAACCR Version 9.1 Item 2110, columns 968-975

(This field does not apply to facilities reporting cases to the MCR on paper abstracts.)

This field records the date on which the electronic abstract was exported from your data system to a file for transmission to the central registry. As with all dates, it is recorded in MMDDCCYY format. Your system probably fills in this date automatically.

Vendor Name / Version Number

NAACCR Version 9.1 field "Vendor Name", Item 2170, columns 981-990

(This field does not apply to facilities reporting cases to the MCR on paper abstracts.)

This field is used by the MCR to track which vendor and which software version submitted the case. It helps define the source and extent of a problem discovered in data submitted by a software provider.

This field should be filled automatically by your data system. It records the name of the computer services vendor who programmed the system submitting the data. The software version number should be included. This field holds up to 10 alphanumeric characters.

Example: Version 3 of the CanDo Registry System might appear as "Cando V3"

Date Case Report Received

NAACCR Version 9.1 Item 2111, columns 996-1003

This field is not collected from your electronic case records. The MCR records the date on which we receive each data file in our offices.

Appendix D

Codes for:

Surgery of Primary Site

Scope of Regional Lymph Node Surgery

Surgery of Other Regional Sites, Distant Sites, or Distant Lymph Nodes

Reconstruction -- First Course

Table of Contents for Appendix D

Table of Contents for Appendix D

ORAL CAVITY

C00.0 - C00.9	**Lip**
C01.9	**Base of Tongue**
C02.0 - C02.9	**Other Parts of Tongue**
C03.0 - C03.9	**Gum**
C04.0 - C04.9	**Floor of Mouth**
C05.0 - C05.9	**Palate**
C06.0 - C06.9	**Other Parts of Mouth**

SURGERY OF PRIMARY SITE

00 None; no cancer-directed surgery of primary site

10 Local tumor destruction, NOS **(WITHOUT PATHOLOGY SPECIMEN)**
- **11** Photodynamic therapy (PDT)
- **12** Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
- **13** Cryosurgery
- **14** Laser

No specimen sent to pathology from this surgical event.

Procedures in codes 20-27 include, but are not limited to:

Shave

Wedge resection

20 Local tumor excision, NOS (**WITH PATHOLOGY SPECIMEN**)
- **21** Photodynamic therapy (PDT)
- **22** Electrocautery
- **23** Cryosurgery
- **24** Laser ablation
- **25** Laser excision
- **26** Polypectomy
- **27** Excisional biopsy

Specimen sent to pathology from this surgical event.

Procedures in code 30 include, but are not limited to:

Hemiglossectomy
Partial glossectomy

30 Wide excision, NOS

Procedures in codes 40-43 include, but are not limited to:

Radical glossectomy

40 Radical excision of tumor, NOS
- **41** Radical excision of tumor ONLY
- **42** Combination of **41** WITH en bloc mandibulectomy (marginal, segmental, hemi-, or total)
- **43** Combination of **41** WITH en bloc maxillectomy (partial, subtotal, total)

90 Surgery, NOS

ORAL CAVITY

99 Unknown if cancer-directed surgery performed; death certificate only

ORAL CAVITY

SCOPE OF REGIONAL LYMPH NODE SURGERY

Regional cervical lymph nodes are:

Caudal jugular (deep cervical)
Cranial jugular (deep cervical)
Dorsal cervical (superficial cervical)
Medial jugular (deep cervical)
Occipital
Paratracheal (anterior cervical)
Prelaryngeal (anterior cervical)
Retroauricular (mastoid, posterior auricular)
Submandibular (submaxillary)
Submental
Supraclavicular

0 No regional lymph nodes removed

1 Regional lymph node(s) removed, NOS

2 Neck dissection, NOS

3 Selective, limited; nodal sampling; "berry picking"

4 Modified / modified radical

5 Radical

9 Unknown; not stated; death certificate only

Terminology of neck dissection (Robbins et al. 1991):

A radical neck dissection includes the removal of all ipsilateral cervical lymph node groups, i.e., lymph nodes from levels I through V (submental, submandibular, cranial jugular, medial jugular, caudal jugular, dorsal cervical nodes along the accessory nerve, and supraclavicular), and removal of the spinal accessory nerve, internal jugular vein and sternocleidomastoid muscle.

In a modified radical neck dissection, the same lymph nodes are removed as in a radical neck dissection; however, one or more non-lymphatic structures are preserved.

A selective neck dissection is a neck dissection with preservation of one or more lymph node groups routinely removed in radical neck dissection.

ORAL CAVITY

SURGERY OF OTHER REGIONAL SITES, DISTANT SITES OR DISTANT LYMPH NODES

0 None; no surgery to other regional or distant sites

1 Surgery to other site(s) or node(s), NOS; unknown if regional or distant

2 Other regional site(s)

3 Mandibulectomy (marginal, segmental, hemi-, or total)

4 Maxillectomy (partial, subtotal, or total)

> Code a mandibulectomy or a maxillectomy in this field only if the procedure is NOT a part of an en bloc resection of the primary tumor. (An en bloc resection is the removal of organs in one piece at one time.) If the mandibulectomy or maxillectomy ARE a part of an en bloc resection of the primary tumor, code under "Surgery of Primary Site."

5 Distant lymph node(s)

6 Distant site(s)

7 Combination of **6** WITH **2**, **3**, **4**, or **5**

9 Unknown; not stated; death certificate only

RECONSTRUCTION - FIRST COURSE

0 No reconstruction / restoration

1 Flaps, grafts, or any type of "...plasty," NOS

2 WITHOUT implant / prosthesis

3 WITH implant / prosthesis

8 Reconstruction / restoration recommended, unknown if performed

9 Unknown; not stated; death certificate only

PAROTID AND OTHER UNSPECIFIED GLANDS

C07.9 Parotid Gland
C08.0 - C08.9 Major Salivary Glands

SURGERY OF PRIMARY SITE

00 None; no cancer-directed surgery of primary site

10 Local tumor destruction, NOS **(WITHOUT PATHOLOGY SPECIMEN)**
- **11** Photodynamic therapy (PDT)
- **12** Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
- **13** Cryosurgery
- **14** Laser

No specimen sent to pathology from this surgical event.

20 Local tumor excision, NOS (**WITH PATHOLOGY SPECIMEN**)
- **21** Photodynamic therapy (PDT)
- **22** Electrocautery
- **23** Cryosurgery
- **24** Laser ablation
- **25** Laser excision
- **26** Polypectomy
- **27** Excisional biopsy

Specimen sent to pathology from this surgical event.

30 Less than total parotidectomy, NOS; less than total removal of major salivary gland, NOS
- **31** Facial nerve spared
- **32** Facial nerve sacrificed
- **33** Superficial lobe ONLY
  - **34** Facial nerve spared
  - **35** Facial nerve sacrificed
- **36** Deep lobe **(WITH or WITHOUT superficial lobe)**
  - **37** Facial nerve spared
  - **38** Facial nerve sacrificed

40 Total parotidectomy, NOS; total removal of major salivary gland, NOS
- **41** Facial nerve spared
- **42** Facial nerve sacrificed

50 Radical parotidectomy, NOS; radical removal of major salivary gland, NOS
- **51** WITHOUT removal of temporal bone
- **52** WITH removal of temporal bone

80 Parotidectomy, NOS

90 Surgery, NOS

PAROTID AND OTHER UNSPECIFIED GLANDS

99 Unknown if cancer-directed surgery performed; death certificate only

SCOPE OF REGIONAL LYMPH NODE SURGERY

Regional cervical lymph nodes are:

Buccal (facial)
Caudal jugular (deep cervical)
Cranial jugular (deep cervical)
Dorsal cervical (superficial cervical)
Medial jugular (deep cervical)
Occipital
Paratracheal (anterior cervical)
Parotid
Prelaryngeal (anterior cervical)
Retroauricular (mastoid, posterior auricular)
Retropharyngeal
Submandibular (submaxillary)
Submental
Supraclavicular

0 No regional lymph nodes removed

1 Regional lymph node(s) removed, NOS

2 Neck dissection, NOS

3 Selective, limited; nodal sampling; "berry picking"

4 Modified / modified radical

5 Radical

9 Unknown; not stated; death certificate only

Terminology of neck dissection (Robbins et al. 1991):

A radical neck dissection includes the removal of all ipsilateral cervical lymph node groups, i.e., lymph nodes from levels I through V (submental, submandibular, cranial jugular, medial jugular, caudal jugular, dorsal cervical nodes along the accessory nerve, and supraclavicular), and removal of the spinal accessory nerve, internal jugular vein and sternocleidomastoid muscle.

In a modified radical neck dissection, the same lymph nodes are removed as in a radical neck dissection; however, one or more non-lymphatic structures are preserved.

A selective neck dissection is a neck dissection with preservation of one or more lymph node groups routinely removed in radical neck dissection.

PAROTID AND OTHER UNSPECIFIED GLANDS

SURGERY OF OTHER REGIONAL SITES, DISTANT SITES OR DISTANT LYMPH NODES

0 None; no surgery to other regional or distant sites

1 Surgery to other site(s) or node(s), NOS; unknown if regional or distant

2 Other regional sites

3 Distant lymph node(s)

4 Distant site(s)

5 Combination of **4** WITH **2** or **3**

9 Unknown; not stated; death certificate only

RECONSTRUCTION - FIRST COURSE

0 No reconstruction / restoration

1 Flaps, grafts, or any type of "...plasty," NOS

2 WITHOUT implant / prosthesis

3 WITH implant / prosthesis

8 Reconstruction / restoration recommended, unknown if performed

9 Unknown; not stated; death certificate only

PHARYNX

C09.0 - C09.9	**Tonsil**
C10.0 - C10.9	**Oropharynx**
C11.0 - C11.9	**Nasopharynx**
C12.9	**Pyriform Sinus**
C13.0 - C13.9	**Hypopharynx**
C14.0	**Pharynx**

SURGERY OF PRIMARY SITE

00 None; no cancer-directed surgery of primary site

10 Local tumor destruction, NOS **(WITHOUT PATHOLOGY SPECIMEN)**
- **11** Photodynamic therapy (PDT)
- **12** Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
- **13** Cryosurgery
- **14** Laser
- **15** Stripping

No specimen sent to pathology from this surgical event.

20 Local tumor excision, NOS (**WITH PATHOLOGY SPECIMEN**)
- **21** Photodynamic therapy (PDT)
- **22** Electrocautery
- **23** Cryosurgery
- **24** Laser ablation
- **25** Laser excision
- **26** Polypectomy
- **27** Excisional biopsy

Specimen sent to pathology from this surgical event.

30 Pharyngectomy, NOS
- **31** Limited/partial pharyngectomy; tonsillectomy, NOS
- **32** Total pharyngectomy

40 Pharyngectomy WITH mandibulectomy (marginal, segmental, hemi-, and/or laryngectomy), NOS
- **41** WITH laryngectomy (laryngopharyngectomy)
- **42** WITH mandibulectomy
- **43** WITH both **41** and **42**

50 Radical pharyngectomy (includes total mandibular resection), NOS
- **51** WITHOUT laryngectomy
- **52** WITH laryngectomy

90 Surgery, NOS

99 Unknown if cancer-directed surgery performed; death certificate only

PHARYNX

SCOPE OF REGIONAL LYMPH NODE SURGERY

Regional cervical lymph nodes are:

Buccal (facial)
Caudal jugular (deep cervical)
Cranial jugular (deep cervical)
Dorsal cervical (superficial cervical)
Medial jugular (deep cervical)
Occipital
Paratracheal (anterior cervical)
Parotid
Prelaryngeal (anterior cervical)
Retroauricular (mastoid, posterior auricular)
Retropharyngeal
Submandibular (submaxillary)
Submental
Supraclavicular

0 No regional lymph nodes removed

1 Regional lymph node(s) removed, NOS

2 Neck dissection, NOS

3 Selective, limited; nodal sampling; "berry picking"

4 Modified / modified radical

5 Radical

9 Unknown; not stated; death certificate only

Terminology of neck dissection (Robbins et al. 1991):

A radical neck dissection includes the removal of all ipsilateral cervical lymph node groups, i.e., lymph nodes from levels I through V (submental, submandibular, cranial jugular, medial jugular, caudal jugular, dorsal cervical nodes along the accessory nerve, and supraclavicular), and removal of the spinal accessory nerve, internal jugular vein and sternocleidomastoid muscle.

In a modified radical neck dissection, the same lymph nodes are removed as in a radical neck dissection; however, one or more non-lymphatic structures are preserved.

A selective neck dissection is a neck dissection with preservation of one or more lymph node groups routinely removed in radical neck dissection.

PHARYNX

SURGERY OF OTHER REGIONAL SITES, DISTANT SITES OR DISTANT LYMPH NODES

0 None; no surgery to other regional or distant sites

1 Surgery to other site(s) or node(s), NOS; unknown if regional or distant

- **2** Laryngectomy ONLY
- **3** Mandibulectomy ONLY (marginal, segmental, or hemi-)
- **4** Combination of **2** and **3**
- **5** Removal of other regional sites
- **6** Combination of **5** WITH any of **2-4**
- **7** Removal of other distant sites(s) or distant lymph node(s)
- **8** Combination of **7** WITH any of **2-6**

9 Unknown; not stated; death certificate only

RECONSTRUCTION - FIRST COURSE

Code only the following procedures:

Myocutaneous flaps (pectoralis major, trapezius)
Reconstruction of mandible
Regional flaps

0 No reconstruction / restoration

1 Reconstruction / restoration, NOS

- **2** WITHOUT implant / prosthesis
- **3** WITH implant / prosthesis

8 Reconstruction / restoration recommended, unknown if performed

9 Unknown; not stated; death certificate only

ESOPHAGUS

C15.0 - C15.9

SURGERY OF PRIMARY SITE

00 None; no cancer-directed surgery of primary site

10 Local tumor destruction, NOS **(WITHOUT PATHOLOGY SPECIMEN)**
- **11** Photodynamic therapy (PDT)
- **12** Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
- **13** Cryosurgery
- **14** Laser

No specimen sent to pathology from this surgical event.

20 Local tumor excision, NOS (**WITH PATHOLOGY SPECIMEN**)
- **21** Photodynamic therapy (PDT)
- **22** Electrocautery
- **23** Cryosurgery
- **24** Laser ablation
- **25** Laser excision
- **26** Polypectomy
- **27** Excisional biopsy

Specimen sent to pathology from this surgical event.

30 Partial esophagectomy

40 Total esophagectomy

50 Partial esophagectomy WITH laryngectomy and/or gastrectomy, NOS
- **51** WITH laryngectomy
- **52** WITH gastrectomy, NOS
  - **53** Partial gastrectomy
  - **54** Total gastrectomy
- **55** Combination of **51** WITH any of **52**-**54**

60 Total esophagectomy, NOS WITH laryngectomy and/or gastrectomy, NOS
- **61** WITH laryngectomy
- **62** WITH gastrectomy, NOS
  - **63** Partial gastrectomy
  - **64** Total gastrectomy
- **65** Combination of **61** WITH any of **62**-**64**

70 Esophagectomy, NOS WITH pharyngectomy and laryngectomy

80 Esophagectomy, NOS

90 Surgery, NOS

99 Unknown if cancer-directed surgery performed; death certificate only

ESOPHAGUS

SCOPE OF REGIONAL LYMPH NODE SURGERY

Regional lymph nodes are different for each anatomical subsite. The following list identifies nodes classified as regional for each subsite:

Cervical esophagus
Cervical, NOS
Internal jugular
Periesophageal
Scalene
Supraclavicular
Upper cervical

Intrathoracic esophagus (upper, middle, lower):
Carinal
Hilar (pulmonary roots)
Internal jugular
Mediastinal, NOS
Paracardial
Periesophageal
Perigastric
Peritracheal
Superior mediastinal
Tracheobronchial

0 No regional lymph nodes removed

1 Regional lymph node(s) removed, NOS

9 Unknown; not stated; death certificate only

Note: Celiac nodes are DISTANT for the intrathoracic esophagus. Code removal of celiac nodes in the data item "Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes."

SURGERY OF OTHER REGIONAL SITES, DISTANT SITES OR DISTANT LYMPH NODES

0 None; no surgery to other regional or distant sites

1 Surgery to other site(s) or node(s), NOS; unknown if regional or distant

2 Other regional sites

3 Distant lymph node(s)

4 Distant site(s)

5 Combination of **4** WITH **2** or **3**

9 Unknown; not stated; death certificate only

ESOPHAGUS

RECONSTRUCTION - FIRST COURSE

Code only the following procedures:

Endoluminal stents
Endoprosthesis
Esophageal stents
Esophagogastric fundoplasty
Esophagogastrostomy (cardioplasty)
Esophagojejunostomy
Esophagomyotomy
Esophagoplasty (plastic repair or reconstruction)
Esophagoplasty WITH / WITHOUT repair of a tracheoesophageal fistula
Esophagostomy
Gastropharyngostomy
Interposition of remaining esophagus with stomach using large or small bowel
Self expanding metal vynal
Stent placement in conjunction with cancer-directed surgery

0 No reconstruction / restoration

1 Reconstruction / restoration, NOS

- **2** WITHOUT implant / prosthesis
- **3** WITH implant / prosthesis

8 Reconstruction / restoration recommended, unknown if performed

9 Unknown; not stated; death certificate only

STOMACH

C16.0 - C16.0

SURGERY OF PRIMARY SITE

00 None; no cancer-directed surgery of primary site

10 Local tumor destruction, NOS **(WITHOUT PATHOLOGY SPECIMEN)**
- **11** Photodynamic therapy (PDT)
- **12** Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
- **13** Cryosurgery
- **14** Laser

No specimen sent to pathology from this surgical event.

20 Local tumor excision, NOS (**WITH PATHOLOGY SPECIMEN**)
- **21** Photodynamic therapy (PDT)
- **22** Electrocautery
- **23** Cryosurgery
- **24** Laser ablation
- **25** Laser excision
- **26** Polypectomy
- **27** Excisional biopsy

Specimen sent to pathology from this surgical event.

Code **30**, partial gastrectomy , includes a sleeve resection of the stomach.
Billroth I: anastomosis to duodenum (duodenostomy)
Billroth II: anastomosis to jejunum (jejunostomy)

30 Gastrectomy, NOS (partial, subtotal, hemi-)
- **31** Antrectomy, lower (distal)
  Resection of less than 40% of stomach
- **32** Lower (distal) gastrectomy (partial, subtotal, hemi-)
- **33** Upper (proximal) gastrectomy (partial, subtotal, hemi-)

40 Near-total or total gastrectomy

A total gastrectomy may follow a previous partial resection of the stomach.

50 Gastrectomy, NOS, WITH removal of a portion of esophagus
- **51** Partial or subtotal gastrectomy
- **52** Near total or total gastrectomy

60 Gastrectomy WITH en bloc resection of other organs, NOS
- **61** Partial or subtotal gastrectomy WITH en bloc resection
- **62** Near total or total gastrectomy WITH en bloc resection
- **63** Radical gastrectomy WITH en bloc resection

An en bloc resection is the removal of organs in one piece at one time, and may include an omentectomy.

80 Gastrectomy, NOS

90 Surgery, NOS

STOMACH

99 Unknown if cancer-directed surgery performed; death certificate only

SCOPE OF REGIONAL LYMPH NODE SURGERY

The regional lymph nodes are different for these areas:

Greater Curvature of Stomach
Gastroduodenal
Gastroepiploic, left
Gastroepiploic, right or NOS
Greater omental
Greater curvature
Pancreaticoduodenal
(anteriorly along the first part of duodenum)
Pyloric, including subpyloric and infrapyloric

Pancreatic and Splenic Area
Pancreaticolienal
Peripancreatic
Splenic hilum

Lesser Curvature of Stomach
Cardioesophageal
Celiac
Common hepatic
Hepatoduodenal
Left gastric
Lesser omental
Lesser curvature
Paracardial; cardial
Perigastric, NOS

0 No regional lymph nodes removed

1 Regional lymph node(s) removed, NOS

9 Unknown; not stated; death certificate only

STOMACH

SURGERY OF OTHER REGIONAL SITES, DISTANT SITES OR DISTANT LYMPH NODES

Do not code the incidental removal of gallbladder, bile ducts, appendix, or vagus nerve. [Incidental removal is when an organ is removed for a reason unrelated to the malignancy (e.g., gallbladder removed for obvious cholelithiasis).]

0 None; no surgery to other regional or distant sites

1 Surgery to other site(s) or node(s), NOS; unknown if regional or distant

2 Removal of other regional sites, ONLY

3 Removal of distant node(s)

4 Removal of distant site

5 Combination of **2** WITH **3** and/or **4**

9 Unknown; not stated; death certificate only

RECONSTRUCTION - FIRST COURSE

0 No reconstruction / restoration

1 Gastrostomy

2 WITHOUT reservoir / pouch

3 WITH reservoir / pouch (abdominal)

9 Unknown; not stated; death certificate only

COLON

C18.0 - C18.9

SURGERY OF PRIMARY SITE

Note: Code the removal / surgical ablation of single or multiple liver metastases under the data item "Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes."

00 None; no cancer-directed surgery of primary site

10 Local tumor destruction, NOS **(WITHOUT PATHOLOGY SPECIMEN)**
- **11** Photodynamic therapy (PDT)
- **12** Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
- **13** Cryosurgery
- **14** Laser

No specimen sent to pathology from this surgical event.

20 Local tumor excision, NOS (**WITH PATHOLOGY SPECIMEN**)
- **21** Photodynamic therapy (PDT)
- **22** Electrocautery
- **23** Cryosurgery
- **24** Laser ablation
- **25** Laser excision
- **26** Polypectomy
- **27** Excisional biopsy

Specimen sent to pathology from this surgical event.

Procedures coded 30-31 include, but are not limited to:

Appendectomy (for an appendix primary only)

Enterocolectomy

Ileocolectomy

Partial colectomy, NOS

Partial resection of transverse colon and flexures

Segmental resection, e.g., cecectomy

Sigmoidectomy

30 Partial colectomy, but less than hemicolectomy
- **31** Partial colectomy WITH permanent colostomy (Hartmann's operation)

  Also code colostomy in the data item "Reconstruction - First Course".

40 Hemicolectomy or greater (but less than total); right colectomy; left colectomy

A hemicolectomy is the removal of total right or left colon and a portion of transverse colon.

50 Total colectomy (removal of colon from cecum to the rectosigmoid or a portion of the rectum)

60 Total proctocolectomy (commonly used for familial polyposis or polyposis coli)

COLON

SURGERY OF PRIMARY SITE (cont.)

70 Colectomy or coloproctectomy WITH an en bloc resection of other organs; pelvic exenteration

> **Code 70** includes any colectomy (partial, hemicolectomy, or total) WITH an en bloc resection of any other organs. The other organs may be partially or totally removed. Procedures that may be a part of an en bloc resection include, but are not limited to: oophorectomy, partial proctectomy, rectal mucosectomy.
>
> En bloc resection is the removal of organs in one piece at one time.
>
> The creation of **ileal reservoir** which is a part of a pelvic exenteration **must also be coded** in the data item "Reconstruction - First Course".

80 Colectomy, NOS

90 Surgery, NOS

99 Unknown if cancer-directed surgery performed; death certificate only

SCOPE OF REGIONAL LYMPH NODE SURGERY

The pathology report often describes regional lymph nodes by their anatomic location: colic nodes; mesenteric nodes; peri-\epi-\para-\ colic. Regional lymph nodes differ for each anatomical subsite. The following list identifies the regional lymph nodes for each subsite of the colon:

Cecum and Appendix
Anterior cecal
Ileocolic
Posterior cecal
Right colic

Ascending colon
Ileocolic
Middle colic
Right colic

Hepatic flexure
Middle colic
Right colic

Transverse colon
Middle colic

Splenic flexure
Inferior mesenteric
Middle colic
Left colic

Descending colon
Inferior mesenteric
Left colic
Sigmoid

Sigmoid colon
Inferior mesenteric
Sigmoid mesenteric
Sigmoidal
Superior rectal (hemorrhoidal)

Superior mesenteric, external iliac and common iliac nodes are DISTANT lymph nodes. Code the removal of any of these nodes in the data item "Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes."

0 No regional lymph nodes removed

1 Regional lymph node(s) removed, NOS

9 Unknown; not stated; death certificate only

COLON

SURGERY OF OTHER REGIONAL SITES, DISTANT SITES OR DISTANT LYMPH NODES

Do not code the incidental removal of appendix, gallbladder, bile ducts, or spleen. [Incidental removal is when an organ is removed for a reason unrelated to the malignancy (e.g., gallbladder removed for obvious cholelithiasis).]

0 None; no surgery to other regional or distant sites

1 Surgery to other site(s) or node(s), NOS; unknown if regional or distant

2 Removal of other regional site(s), ONLY

3 Removal / surgical ablation of single liver metastasis

4 Removal / surgical ablation of multiple liver metastases

5 Combination of code **2** WITH **3** or **4**

6 Removal of other distant site(s) or distant lymph node(s), ONLY

7 Combination of code **6** WITH **3** or **5**

8 Combination of code **6** WITH **4**

9 Unknown; not stated; death certificate only

RECONSTRUCTION - FIRST COURSE

Do not code anastomosis as reconstruction.

0 No reconstruction / restoration

1 Colostomy (permanent)

2 Ileostomy, NOS

3 WITHOUT a reservoir or pouch

4 WITH an abdominal reservoir or pouch

5 WITH an anal reservoir or pouch; artificial sphincter

9 Unknown; not stated; death certificate only

RECTOSIGMOID

C19.9

SURGERY OF PRIMARY SITE

Note: Code removal / surgical ablation of single or multiple liver metastases under the data item "Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes."

00 None; no cancer-directed surgery of primary site

10 Local tumor destruction, NOS **(WITHOUT PATHOLOGY SPECIMEN)**
- **11** Photodynamic therapy (PDT)
- **12** Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
- **13** Cryosurgery
- **14** Laser ablation

No specimen sent to pathology from this surgical event.

20 Local tumor excision, NOS (**WITH PATHOLOGY SPECIMEN**)
- **21** Photodynamic therapy (PDT)
- **22** Electrocautery
- **23** Cryosurgery
- **24** Laser ablation
- **25** Laser excision
- **26** Polypectomy
- **27** Excisional biopsy

Specimen sent to pathology from this surgical event.

Procedures coded 30 include, but are not limited to:

Anterior resection

Hartmann's operation

Low anterior resection (LAR)

Partial colectomy, NOS

Rectosigmoidectomy, NOS

Sigmoidectomy

30 Wedge or segmental resection; partial proctosigmoidectomy, NOS

Procedures coded 40 include, but are not limited to:

Altemeier's operation

Duhamel's operation

Soave's submucosal resection

Swenson's operation

Turnbull's operation

40 Pull through WITH sphincter preservation (coloanal anastomosis)

RECTOSIGMOID

SURGERY OF PRIMARY SITE (cont.)

Procedures coded 50 include, but are not limited to:

Abdominoperineal resection (A & P resection)

Anterior/posterior resection (A/P resection) / Miles' operation

Rankin's operation

50 Total proctectomy

51 Total colectomy (removal of the colon from cecum to the rectosigmoid or a portion of the rectum)

60 Combination of **50** and **51**

70 Colectomy or proctocolectomy WITH an en bloc resection of other organs; pelvic exenteration

> En bloc resection is the removal of organs in one piece at one time. Procedures that may be a part of an en bloc resection include, but are not limited to: an oophorectomy and a rectal mucosectomy.
>
> Code **70** includes any colectomy (partial, hemicolectomy, or total) WITH an en bloc resection of any other organs. The other organs may be partially or totally removed.
>
> An **ileal reservoir** which is part of a pelvic exenteration **should be coded in the data item "Reconstruction - First Course".**

80 Colectomy, NOS; Proctectomy, NOS

90 Surgery, NOS

99 Unknown if cancer-directed surgery performed; death certificate only

RECTOSIGMOID

SCOPE OF REGIONAL LYMPH NODE SURGERY

The pathology report often identifies regional lymph nodes by their anatomic location: colic; mesenteric; peri-/para-/ colic; perirectal; rectal.

The specific regional lymph nodes are:

Inferior mesenteric
Left colic
Middle rectal (hemorrhoidal)
Perirectal
Sigmoid mesenteric
Sigmoidal
Superior rectal (superior hemorrhoidal)

Superior mesenteric, external iliac and common iliac nodes are DISTANT nodes. Code removal of these nodes under the data item "Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes."

0 No regional lymph nodes removed

1 Regional lymph node(s) removed, NOS

9 Unknown; not stated; death certificate only

RECTOSIGMOID

SURGERY OF OTHER REGIONAL SITES, DISTANT SITES OR DISTANT LYMPH NODES

Do not code the incidental removal of appendix, gallbladder, or bile ducts. [Incidental removal is when an organ is removed for a reason unrelated to the malignancy (e.g., gallbladder removed for obvious cholelithiasis)].

0 None; no surgery to other regional or distant sites

1 Surgery to other site(s) or node(s), NOS; unknown if regional or distant

2 Removal of other regional site(s), ONLY

3 Removal / surgical ablation of single liver metastasis

4 Removal / surgical ablation of multiple liver metastases

5 Combination of code **2** WITH **3** or **4**

6 Removal of other distant site(s) or distant lymph node(s), ONLY

7 Combination of code **6** WITH **3**, **4** or **5**

8 Combination of code **6** WITH **3** or **5**

9 Unknown; death certificate only

RECONSTRUCTION - FIRST COURSE

0 No reconstruction / restoration

1 Colostomy (permanent)

2 Ileostomy, NOS

3 WITHOUT a reservoir or pouch

4 WITH an abdominal reservoir or pouch

5 WITH an anal reservoir or pouch; artificial sphincter

9 Unknown; not stated; death certificate only

RECTUM

C20.9

SURGERY OF PRIMARY SITE

Note: Code removal / surgical ablation of single or multiple liver metastases under the data item "Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes."

00 None; no cancer-directed surgery of primary site

10 Local tumor destruction, NOS **(WITHOUT PATHOLOGY SPECIMEN)**
- **11** Photodynamic therapy (PDT)
- **12** Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
- **13** Cryosurgery
- **14** Laser

No specimen sent to pathology from this surgical event.

20 Local tumor excision, NOS (**WITH PATHOLOGY SPECIMEN**)
- **21** Photodynamic therapy (PDT)
- **22** Electrocautery
- **23** Cryosurgery
- **24** Laser ablation
- **25** Laser excision
- **26** Polypectomy
- **27** Excisional biopsy
- **28** Curette and fulguration

Specimen sent to pathology from this surgical event.

Procedures coded 30 include, but are not limited to:

Anterior resection

Hartmann's operation

Low anterior resection (LAR)

Trans-sacral rectosigmoidectomy

30 Wedge or segmental resection; partial proctectomy, NOS

Procedures coded 40 include, but are not limited to:

Altemeier's operation

Duhamel's operation

Soave's submucosal resection

Swenson's operation

Turnbull's operation

40 Pull through WITH sphincter preservation (coloanal anastomosis)

RECTUM

SURGERY OF PRIMARY SITE (cont.)

Procedures coded 50 include, but are not limited to:

Abdominoperineal resection (A & P resection)
Anterior/Posterior (A/P) resection / Miles' operation
Rankin's operation

50 Total proctectomy

60 Total proctocolectomy, NOS

70 Proctectomy or proctocolectomy WITH an en bloc resection of other organs; pelvic exenteration

En bloc resection is the removal of organs in one piece at one time.

The creation of an **ileal reservoir** which is a part of a pelvic exenteration **should be coded in the data item "Reconstruction - First Course".**

80 Proctectomy, NOS

90 Surgery, NOS

99 Unknown if cancer-directed surgery performed; death certificate only

RECTUM

SCOPE OF REGIONAL LYMPH NODE SURGERY

The pathology report often identifies regional lymph nodes by their anatomic location: mesenteric nodes; perirectal nodes; rectal nodes.

The specific regional lymph nodes are:

Inferior rectal (hemorrhoidal)
Inferior mesenteric
Internal iliac
Lateral sacral
Middle rectal (hemorrhoidal)
Perirectal
Presacral
Sacral promontory (Gerota's)
Sigmoid mesenteric
Superior rectal (hemorrhoidal)

Superior mesenteric, external iliac and common iliac nodes are classified as DISTANT lymph nodes. Code removal of these nodes under the data item "Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes."

0 No regional lymph nodes removed

1 Regional lymph node(s) removed, NOS

9 Unknown; not stated; death certificate only

RECTUM

SURGERY OF OTHER REGIONAL SITES, DISTANT SITES OR DISTANT LYMPH NODES

Do not code the incidental removal of appendix, gallbladder, bile ducts, or spleen. [Incidental removal is when an organ is removed for a reason unrelated to the malignancy (e.g., gallbladder removed for obvious cholelithiasis).]

0 None; no surgery to other regional or distant sites

1 Surgery to other site(s) or node(s), NOS; unknown if regional or distant

2 Removal of other regional site(s), ONLY

3 Removal / surgical ablation of single liver metastasis

4 Removal / surgical ablation of multiple liver metastases

5 Combination of code **2** WITH **3** or **4**

6 Removal of other distant site(s) or distant lymph node(s), ONLY

7 Combination of code **6** WITH **3**, **4** or **5**

8 Combination of code **6** WITH **3** or **5**

9 Unknown; death certificate only

RECONSTRUCTION - FIRST COURSE

0 No reconstruction / restoration

1 Colostomy (permanent)

2 Ileostomy, NOS

3 WITHOUT a reservoir or pouch

4 WITH an abdominal reservoir or pouch

5 WITH an anal reservoir or pouch; artificial sphincter

9 Unknown; not stated; death certificate only

ANUS

C21.0 - C21.8

SURGERY OF PRIMARY SITE

00 None; no cancer-directed surgery of primary site

Procedures for codes 10-14 include, but are not limited to:

Cryosurgery
Electrocautery
Excisional biopsy
Laser
Thermal ablation

10 Local tumor destruction, NOS **(WITHOUT PATHOLOGY SPECIMEN)**
- **11** Photodynamic therapy (PDT)
- **12** Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
- **13** Cryosurgery
- **14** Laser

No specimen sent to pathology from this surgical event.

20 Local tumor excision, NOS (**WITH PATHOLOGY SPECIMEN**)
- **21** Photodynamic therapy (PDT)
- **22** Electrocautery
- **23** Cryosurgery
- **24** Laser ablation
- **25** Laser excision
- **26** Polypectomy
- **27** Excisional biopsy

Specimen sent to pathology from this surgical event.

Note: Margins of resection may have microscopic involvement.

60 Abdominal perineal resection, NOS

90 Surgery, NOS

99 Unknown if cancer-directed surgery performed; death certificate only

ANUS

SCOPE OF REGIONAL LYMPH NODE SURGERY

0 No regional lymph nodes removed

1 Regional lymph node(s) removed, NOS

2 Perirectal, anorectal lymph nodes

3 Internal iliac lymph nodes (hypogastric), unilateral

4 Inguinal lymph nodes, unilateral

5 Combination of **2** and **4**

6 Bilateral internal iliac and/or bilateral inguinal lymph nodes

9 Unknown; not stated; death certificate only

SURGERY OF OTHER REGIONAL SITES, DISTANT SITES OR DISTANT LYMPH NODES

0 None; no surgery to other regional or distant sites

1 Surgery to other site(s) or node(s), NOS; unknown if regional or distant

2 Other regional sites

3 Distant lymph node(s)

4 Distant site(s)

5 Combination of **4** WITH **2** or **3**

9 Unknown; not stated; death certificate only

RECONSTRUCTION - FIRST COURSE

0 No reconstruction / restoration

1 Colostomy (permanent)

2 Ileostomy, NOS

3 WITHOUT a reservoir or pouch

4 WITH an abdominal reservoir or pouch

5 WITH an anal reservoir or pouch; artificial sphincter

9 Unknown; not stated; death certificate only

LIVER and INTRAHEPATIC BILE DUCTS

C22.0, C22.1

SURGERY OF PRIMARY SITE

00 None; no cancer-directed surgery of primary site

10 Local tumor destruction, NOS
- **11** Photodynamic therapy (PDT)
- **12** Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
- **13** Cryosurgery
- **14** Laser
- **15** Alcohol (percutaneous ethanol injection) (PEI)
- **16** Heat
- **17** Other (ultrasound, acetic acid)

20 Wedge resection, NOS; segmental resection

30 Lobectomy, NOS
- **31** Simple
- **32** Extended (resection of a single lobe plus a segment of another lobe)

40 Excision of a bile duct (for an intrahepatic bile duct primary only)

70 Total hepatectomy WITH transplant
A liver transplant must also be coded under the data item "Reconstruction - First Course".

80 Hepatectomy, NOS

90 Surgery, NOS

99 Unknown if cancer-directed surgery performed; death certificate only

LIVER and INTRAHEPATIC BILE DUCTS

SCOPE OF REGIONAL LYMPH NODE SURGERY

Regional lymph nodes are the hilar nodes...:

...along the portal vein
...along the inferior vena cava
...along the proper hepatic artery
...at the hepatic pedicle

0 No regional lymph nodes removed

1 Regional lymph node(s) removed, NOS

9 Unknown; not stated; death certificate only

SURGERY OF OTHER REGIONAL SITES, DISTANT SITES OR DISTANT LYMPH NODES

0 None; no surgery to other regional or distant sites

1 Surgery to other site(s) or node(s), NOS; unknown if regional or distant

2 Other regional sites

3 Distant lymph node(s) (includes inferior phrenic lymph nodes)

4 Distant site(s)

5 Combination of **4** WITH **2** or **3**

9 Unknown; not stated; death certificate only

RECONSTRUCTION - FIRST COURSE

0 No reconstruction / restoration

1 Rioux-en-Y; hepatojejunostomy including stent

2 Liver transplant

9 Unknown; not stated; death certificate only

PANCREAS

C25.0 - C25.9

SURGERY OF PRIMARY SITE

00 None; no cancer-directed surgery of primary site

10 Local excision of tumor, NOS

20 Partial pancreatectomy, NOS

40 Total pancreatectomy

50 Local or partial pancreatectomy and duodenectomy
- **51** Without subtotal gastrectomy
- **52** With subtotal gastrectomy (Whipple)

60 Total pancreatectomy and subtotal gastrectomy or duodenectomy

70 Extended pancreatoduodenectomy

80 Pancreatectomy, NOS

90 Surgery, NOS

99 Unknown if cancer-directed surgery performed; death certificate only

PANCREAS

SCOPE OF REGIONAL LYMPH NODE SURGERY

The regional lymph nodes are:

Celiac **(head only)**
Hepatic artery
Infrapyloric **(head only)**
Lateral aortic
Pancreaticolienal **(body and tail only)**
Peripancreatic (superior, inferior, anterior, posterior splenic)
Retroperitoneal
Splenic **(body and tail only)**
Subpyloric **(head only)**
Superior mesenteric

0 No regional lymph nodes removed

1 Regional lymph node(s) removed, NOS

2 Extended lymphadenectomy

An extended pancreaticoduodenectomy incorporates selected aspects of the Whipple procedure and regional pancreatectomy. A wide Kocher maneuver removes all lymphatic tissue over the medial aspect of the right kidney, inferior vena cava, and left renal vein.

9 Unknown; not stated; death certificate only

SURGERY OF OTHER REGIONAL SITES, DISTANT SITES OR DISTANT LYMPH NODE(S)

0 None; no surgery to other regional or distant sites

1 Surgery to other site(s) or node(s), NOS; unknown if regional or distant

2 Removal of other regional sites, ONLY

3 Removal of distant node(s)

4 Removal of distant site

5 Combination of **2** WITH **3** and/or **4**

9 Unknown; not stated; death certificate only

RECONSTRUCTION - FIRST COURSE

Use the following code only:

9 Not applicable (There are no known reconstructive procedures for this site.)

LARYNX

C32.0 - C32.9

SURGERY OF PRIMARY SITE

00 None; no cancer-directed surgery of primary site

10 Local tumor destruction, NOS **(WITHOUT PATHOLOGY SPECIMEN)**
- **11** Photodynamic therapy (PDT)
- **12** Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
- **13** Cryosurgery
- **14** Laser
- **15** Stripping

No specimen sent to pathology from this surgical event.

20 Local tumor excision, NOS (**WITH PATHOLOGY SPECIMEN**)
- **21** Photodynamic therapy (PDT)
- **22** Electrocautery
- **23** Cryosurgery
- **24** Laser ablation
- **25** Laser excision
- **26** Polypectomy
- **27** Excisional biopsy
- **28** Stripping

Specimen sent to pathology from this surgical event.

30 Partial excision of the primary site, NOS; subtotal/partial laryngectomy, NOS; hemilaryngectomy, NOS
- **31** Vertical laryngectomy
- **32** Anterior commissure laryngectomy
- **33** Supraglottic laryngectomy

40 Total or radical laryngectomy, NOS
- **41** Total laryngectomy ONLY
- **42** Radical laryngectomy ONLY

50 Pharyngolaryngectomy

80 Laryngectomy, NOS

90 Surgery, NOS

99 Unknown if cancer-directed surgery performed; death certificate only

LARYNX

SCOPE OF REGIONAL LYMPH NODE SURGERY

The regional cervical lymph nodes are:

Buccal (facial)
Caudal jugular (deep cervical)
Cranial jugular (deep cervical)
Dorsal cervical (superficial cervical)
Medial jugular (deep cervical)
Occipital
Paratracheal (anterior cervical)
Parotid
Prelaryngeal (anterior cervical)
Retroauricular (mastoid, posterior auricular)
Retropharyngeal
Submandibular (submaxillary)
Submental
Supraclavicular

0 No regional lymph nodes removed

1 Regional lymp h node(s) removed, NOS

2 Neck dissection, NOS

3 Selective, limited; nodal sampling; "berry picking"

4 Modified / modified radical

5 Radical

9 Unknown; not stated; death certificate only

Terminology of neck dissection (Robbins et al. 1991):

A radical neck dissection includes the removal of all ipsilateral cervical lymph node groups, i.e., lymph nodes from levels I through V (submental, submandibular, cranial jugular, medial jugular, caudal jugular, dorsal cervical nodes along the accessory nerve, and supraclavicular), and removal of the spinal accessory nerve, internal jugular vein and sternocleidomastoid muscle.

In a modified radical neck dissection, the same lymph nodes are removed as in a radical neck dissection; however, one or more non-lymphatic structures are preserved.

A selective neck dissection is a neck dissection with preservation of one or more lymph node groups routinely removed in radical neck dissection.

LARYNX

SURGERY OF OTHER REGIONAL SITES, DISTANT SITES OR DISTANT LYMPH NODES

0 None; no surgery to other regional or distant sites

1 Surgery to other site(s) or node(s), NOS; unknown if regional or distant

2 Other regional sites

3 Distant lymph node(s)

4 Distant site(s)

5 Combination of **4** WITH **2** or **3**

9 Unknown; not stated; death certificate only

RECONSTRUCTION - FIRST COURSE

0 No reconstruction / restoration

1 Flaps, grafts, any type of "...plasty," NOS

2 WITHOUT implant / prosthesis

3 WITH implant / prosthesis

8 Reconstruction / restoration recommended, unknown if performed

9 Unknown; not stated; death certificate only

LUNG

C34.0 - C34.9

SURGERY OF PRIMARY SITE

00 None; no cancer-directed surgery of primary site

10 Local tumor destruction or excision, NOS; Photodynamic therapy (PDT)
- **11** Excision
- **12** Laser ablation or excision
- **13** Cautery; fulguration
- **14** Bronchial sleeve resection ONLY

20 Resection of less than one lobe
- **21** Wedge resection
- **22** Segmental resection, including lingulectomy

30 Resection of at least one lobe, but less than the whole lung (partial pneumonectomy, NOS)
- **31** Lobectomy
- **32** Bilobectomy

Procedures coded 40 include, but are not limited to:

Complete pneumonectomy

Pneumonectomy, NOS

Sleeve pneumonectomy

Standard pneumonectomy

Total pneumonectomy

40 Resection of whole lung

50 Resection of lung WITH an en bloc resection of other organs
- **51** Wedge resection
- **52** Lobectomy
- **53** Bilobectomy
- **54** Pneumonectomy (less than a radical or extended pneumonectomy)

En bloc resection is the removal of organs in one piece at one time.

60 Radical pneumonectomy (a complete pneumonectomy WITH removal of mediastinal lymph nodes)

Removal of mediastinal nodes is also coded in the data fields "Scope of Regional Lymph Node Surgery" and "Number of Regional Nodes Removed."

LUNG

SURGERY OF PRIMARY SITE (cont.)

70 Extended radical pneumonectomy [a radical pneumonectomy (including removal of mediastinal nodes) and the removal of other tissues or nodes]

Removal of mediastinal nodes is also coded in the data fields "Scope of Regional Lymph Node Surgery" and "Number of Regional Nodes Removed."

80 Resection of lung, NOS

90 Surgery, NOS

99 Unknown if cancer-directed surgery performed; death certificate only

SCOPE OF REGIONAL LYMPH NODE SURGERY

Mediastinal nodes are:

Aortic (includes subaortic, aorticopulmonary window, periaortic, including ascending aorta or including azygos)
Periesophageal
Peritracheal (including those that may be designated tracheobronchial, i.e., lower peritracheal, phrenic)
Pre- and retrotracheal (includes precarinal)
Pulmonary ligament
Subcarinal

0 No regional lymph nodes removed

1 Regional lymph node(s) removed, NOS

2 Intrapulmonary (includes interlobar, lobar, segmental), ipsilateral hilar and/or ipsilateral peribronchial nodes

3 Ipsilateral mediastinal and/or subcarinal nodes

4 Combination of **2** and **3**

5 Contralateral mediastinal, contralateral hilar, ipsilateral or contralateral scalene and/or supraclavicular nodes

6 Combination of **5** WITH **2** or **3**

9 Unknown; not stated; death certificate only

LUNG

SURGERY OF OTHER REGIONAL SITES, DISTANT SITES OR DISTANT LYMPH NODES

Do not code the incidental removal of ribs (ribs are removed to provide access to the lung).

0 None; no surgery to other regional sites, distant sites or distant lymph nodes

1 Surgery to other site(s)or node(s), NOS; unknown if regional or distant

2 Surgery to a regional site ONLY

3 Removal of a solitary lesion in the same lung (primary site), different (non-primary) lobe
There is one primary: Patient has two tumors with the same histology in different lobes of the same lung.

4 Resection of metastasis in a distant site(s) or resection of distant lymph nodes(s), NOS

5 Removal of a solitary lesion in the contralateral lung
Patient has one primary: There is a primary tumor or tumor(s) in one lung and a solitary metastatic lesion in the contralateral lung.

6 Removal of a solitary lesion in a distant site or a distant lymph node, NOS
This includes, but is not limited to, the removal of a solitary metastatic brain lesion.

7 Removal of multiple lesions in distant site(s)

9 Unknown; not stated; death certificate only

RECONSTRUCTION - FIRST COURSE

0 No reconstruction / restoration

1 Chest wall reconstruction / restoration, NOS

9 Unknown; not stated; death certificate only

BONES, JOINTS, CARTILAGE, NERVES, OTHER CONNECTIVE and SOFT TISSUES

C40.0 - C40.9, C41.0 - C41.9	**Bones, Joints, and Articular Cartilage**
C47.0 - C47.9	**Peripheral Nerves and Autonomic Nervous System**
C49.0 - C49.9	**Connective, Subcutaneous and Other Soft Tissues**

SURGERY OF PRIMARY SITE

00 None; no cancer-directed surgery of primary site

10 Local tumor destruction or excision

20 Partial resection / internal hemipelvectomy (pelvis)

30 Radical excision or resection of lesion with limb salvage

40 Amputation of limb
- **41** Partial amputation of limb
- **42** Total amputation of limb

50 Major amputation, NOS
- **51** Forequarter, including scapula
- **52** Hindquarter, including ilium/hip bone
- **53** Hemipelvectomy

90 Surgery, NOS

99 Unknown if cancer-directed surgery performed; death certificate only

SCOPE OF REGIONAL LYMPH NODE SURGERY

0 No regional lymph nodes removed

1 Regional lymph node(s) removed, NOS

9 Unknown; not stated; death certificate only

BONES, JOINTS, CARTILAGE, NERVES, OTHER CONNECTIVE and SOFT TISSUES

SURGERY OF OTHER REGIONAL SITES, DISTANT SITES OR DISTANT LYMPH NODES

0 None; no surgery to other regional or distant sites

1 Surgery to other site(s) or node(s), NOS; unknown if regional or distant

2 Other regional site(s)

5 Distant lymph node(s)

6 Distant site(s)

7 Combination of **6** WITH **2** or **5**

9 Unknown; not stated; death certificate only

RECONSTRUCTION - FIRST COURSE

0 No reconstruction / restoration

1 Flap; graft; any type of "...plasty," NOS

2 WITHOUT implant / prosthesis

3 WITH implant / prosthesis

8 Reconstruction / restoration recommended, unknown if performed

9 Unknown; not stated; death certificate only

SPLEEN and LYMPH NODES

C42.2, C77.0 - C77.9

SURGERY OF PRIMARY SITE

00 None; no cancer-directed surgery of primary site

10 Local excision or destruction, NOS;
Lymph node biopsy that is not an excision of a full node chain (for lymph node primaries)

20 Splenectomy, NOS (for spleen primaries only)
- **21** Partial splenectomy
- **22** Total splenectomy

30 Lymph node dissection, NOS (for lymph node primaries only)
- **31** One chain
- **32** Two or more chains

40 Lymph node dissection, NOS plus splenectomy
- **41** One chain
- **42** Two or more chains

50 Lymph node dissection, NOS and partial / total removal of adjacent organ(s)
- **51** One chain
- **52** Two or more chains

60 Lymph node dissection, NOS and partial / total removal of adjacent organ(s) PLUS splenectomy;
Staging laparotomy (for lymph node primaries)
- **61** One chain
- **62** Two or more chains

90 Surgery, NOS

99 Unknown if cancer-directed surgery performed; death certificate only

SPLEEN and LYMPH NODES

SCOPE OF REGIONAL LYMPH NODE SURGERY

For lymph node primary sites, use code 9 only.

For spleen primaries, use codes 0, 1 or 9:

0 No regional lymph nodes removed

1 Regional lymph node(s) removed, NOS

9 Unknown; not stated; death certificate only

SURGERY OF OTHER REGIONAL SITES, DISTANT SITES OR DISTANT LYMPH NODES

0 None; no surgery to other regional or distant sites

1 Surgery to other site(s) or node(s), NOS; unknown if regional or distant

2 Other regional site(s)

5 Distant lymph node(s)

6 Distant site(s)

7 Combination of **6** WITH **2** or **5**

9 Unknown; not stated; death certificate only

RECONSTRUCTION - FIRST COURSE

Use the following code only:

9 Not applicable (At this time, reconstructive procedures are not being collected for these sites.)

SKIN

C44.0 - C44.9

SURGERY OF PRIMARY SITE

00 None; no cancer-directed surgery of primary site

10 Local tumor destruction, NOS **(WITHOUT PATHOLOGY SPECIMEN)**
- **11** Photodynamic therapy (PDT)
- **12** Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
- **13** Cryosurgery
- **14** Laser ablation

No specimen sent to pathology from this surgical event.

20 Local tumor excision, NOS (**WITH PATHOLOGY SPECIMEN**)
- **21** Photodynamic therapy (PDT)
- **22** Electrocautery
- **23** Cryosurgery
- **24** Laser ablation
- **25** Laser excision
- **26** Polypectomy
- **27** Excisional biopsy

Specimen sent to pathology from this surgical event.

30 Biopsy of primary tumor followed by a gross excision of the lesion
- **31** Shave biopsy followed by a gross excision of the lesion; Mohs' surgery
- **32** Punch biopsy followed by a gross excision of the lesion
- **33** Incisional biopsy followed by a gross excision of the lesion

Less than a wide excision, less than 1 cm margin.

40 Wide excision or re-excision of lesion or minor (local) amputation, NOS

Margins of excision are 1 cm or more. Margins may be microscopically involved.

Local amputation is the surgical resection of digits, ear, eyelid, lip, or nose.

50 Radical excision of a lesion, NOS

Margins of excision are greater than 1 cm and grossly tumor-free. The margins may be microscopically involved.

60 Major amputation, NOS

90 Surgery, NOS

99 Unknown if cancer-directed surgery performed; death certificate only

SKIN

SCOPE OF REGIONAL LYMPH NODE SURGERY

Regional lymph nodes are different for each anatomical subsite.

Head and neck
Cervical
Ipsilateral preauricular
Submandibular
Supraclavicular

Thorax
Ipsilateral axillary

Arm
Ipsilateral epitrochlear and axillary

Abdomen, loins, buttocks
Ipsilateral inguinal

Anal margin and perianal skin
Ipsilateral inguinal

Leg
Ipsilateral inguinal and popliteal

There are boundary zones between the subsites (i.e., between the thorax and arm, the boundary zone is the shoulder and axilla). The boundary zones do not belong to either subsite. **If a tumor originates in one of these 4-cm boundary zones, the nodes on either side of the bands are regional.**

Between the subsites "Head and neck" and "Thorax", the boundary zone is "clavicula-acromion-upper shoulder blade edge".

Between the subsites "Thorax" and "Arm", the boundary zone is "shoulder-axilla-shoulder".

Between the subsites "Thorax" and "Abdomen, loins, and buttocks", the boundary zones are "middle between navel and costal arch" in the front, and "lower border of thoracic vertebrae (midtransverse axis)" in the back.

Between the subsites "Abdomen, loins, and buttocks" and "Leg", the boundary zone is "groin-trochanter-gluteal sulcus".

Between right and left sides, the boundary zone is the midline.

Iliac, other pelvic, abdominal or intrathoracic lymph nodes are DISTANT. Code the removal of these nodes under the data item "Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes."

0 No regional lymph nodes removed

1 Sentinel node, NOS (the first node to receive drainage from a primary tumor, identified by an injection of a dye or radio label at the site of the primary tumor)

2 Regional lymph nodes removed, NOS

9 Unknown; not stated; death certificate only

SKIN

SURGERY OF OTHER REGIONAL SITES, DISTANT SITES OR DISTANT LYMPH NODES

0 None; no surgery to other regional or distant sites

1 Surgery to other site(s) or node(s), NOS; unknown if regional or distant

2 Other regional sites

3 Distant lymph node(s)

4 Distant site(s)

5 Combination of **4** WITH **2** or **3**

9 Unknown; not stated; death certificate only

RECONSTRUCTION - FIRST COURSE

0 No reconstruction / restoration

1 Pedicle flap, free flap, skin graft, NOS

8 Reconstruction / restoration recommended, unknown if performed

9 Unknown; not stated; death certificate only

BREAST

C50.0 - C50.9

SURGERY OF PRIMARY SITE

00 None; no cancer-directed surgery of primary site

Procedures coded as **10-17** remove the gross primary tumor and some of the breast tissue (breast-conserving or breast-preserving). There may be microscopic residual tumor.

10 Partial mastectomy, NOS; less than total mastectomy, NOS
- **11** Nipple resection
- **12** Lumpectomy or excisional biopsy
- **13** Re-excision of the biopsy site for gross or microscopic residual disease.
- **14** Wedge resection
- **15** Quadrantectomy
- **16** Segmental mastectomy
- **17** Tylectomy

30 Subcutaneous mastectomy (the removal of breast tissue without the nipple and areolar complex or overlying skin)

This procedure is rarely performed to treat malignancies.

40 Total (simple) mastectomy, NOS
- **41** WITHOUT removal of uninvolved contralateral breast
- **42** WITH removal of uninvolved contralateral breast

A simple mastectomy removes all breast tissue, the nipple, and areolar complex. An axillary dissection is not done.

For single primaries only, code removal of **involved** contralateral breast under the data item "Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes."

50 Modified radical mastectomy
- **51** WITHOUT removal of uninvolved contralateral breast
- **52** WITH removal of uninvolved contralateral breast

Modified radical mastectomy removes all breast tissue, the nipple, the areolar complex, and variable amounts of breast skin. The procedure involves an en bloc resection of the axilla. The specimen may or may not include a portion of the pectoralis major muscle; includes an en bloc axillary dissection.

For single primaries only, code removal of **involved** contralateral breast under the data item "Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes."

BREAST

SURGERY OF PRIMARY SITE (cont.)

60 Radical mastectomy, NOS
- **61** WITHOUT removal of uninvolved contralateral breast
- **62** WITH removal of uninvolved contralateral breast

Radical mastectomy is the removal of breast tissue, nipple, areolar complex, a variable amount of skin, pectoralis minor, and pectoralis major; includes an en bloc axillary dissection.

For single primaries only, code removal of **involved** contralateral breast under the data item "Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes."

70 Extended radical mastectomy
- **71** WITHOUT removal of uninvolved contralateral breast
- **72** WITH removal of uninvolved contralateral breast

Extended radical mastectomy is the removal of breast tissue, nipple, areolar complex, variable amounts of skin, pectoralis minor, and pectoralis major; includes removal of internal mammary nodes and an en bloc axillary dissection.

For single primaries only, code removal of **involved** contralateral breast under the data item "Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes."

80 Mastectomy, NOS

90 Surgery, NOS

99 Unknown if cancer-directed surgery performed; death certificate only

SCOPE OF REGIONAL LYMPH NODE SURGERY

0 No regional lymph nodes removed

1 Sentinel lymph node(s) removed (the first node to receive drainage from a primary tumor, identified by an injection of a dye or radio label at the site of the primary tumor)

2 Regional lymph node(s) removed, NOS; axillary, NOS (Levels I, II, or III lymph nodes); intramammary, NOS

3 Combination of **1** and **2**

4 Internal mammary

5 Combination of **4** WITH any of **1-3**

9 Unknown; not stated; death certificate only

BREAST

SURGERY OF OTHER REGIONAL SITES, DISTANT SITES OR DISTANT LYMPH NODES

Do not code removal of fragments or tags of muscles; removal of the pectoralis minor; the resection of pectoralis muscles, NOS; or the resection of fascia with no mention of muscle.

0 None; no surgery to other regional or distant sites

1 Surgery to other site(s) or node(s), NOS; unknown if regional or distant

2 Other regional site(s)

3 Distant lymph node(s)

4 Distant site(s)

5 Removal of involved contralateral breast (single primary only)

6 Combination of **4** or **5** WITH **2** or **3**

9 Unknown; not stated; death certificate only

RECONSTRUCTION - FIRST COURSE

(The insertion of a tissue expander is often the beginning of the reconstructive procedure.)

0 No reconstruction / restoration

1 Reconstruction, NOS (unknown if flap)

2 Implant; reconstruction WITHOUT flap

3 Reconstruction WITH flap, NOS

4 Latissimus dorsi flap

5 Abdomminus recti flap

6 Flap, NOS + implant

7 Latissimus dorsi flap + implant

8 Abdominus recti + implant

9 Unknown; not stated; death certificate only

CERVIX UTERI

C53.0 - C53.9

SURGERY OF PRIMARY SITE

For **invasive** cancers, dilation (dilatation) and curettage is coded as an incisional biopsy (**02**) under the data item "Non Cancer-Directed Surgery."

00 None; no cancer-directed surgery of primary site

10 Local tumor destruction, NOS **(WITHOUT PATHOLOGY SPECIMEN)**
- **11** Photodynamic therapy (PDT)
- **12** Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
- **13** Cryosurgery
- **14** Laser
- **15** LEEP

No specimen sent to pathology from this surgical event.

20 Local tumor destruction or excision, NOS (**WITH PATHOLOGY SPECIMEN**)
- **21** Electrocautery
- **22** Cryosurgery
- **23** Laser
- **24** Cone biopsy WITH gross excision of lesion
- **25** Dilation (dilatation) and curettage; endocervical curettage (cancer-directed for in situ only)
- **26** Excisional biopsy, NOS
- **27** Cone biopsy
- **28** LEEP
- **29** Trachelectomy; removal of cervical stump; cervicectomy

Specimen sent to pathology from this surgical event.

30 Total hysterectomy (simple, pan-) WITHOUT removal of tubes and ovaries

Total hysterectomy removes both the corpus and cervix uteri and may also include a portion of vaginal cuff.

40 Total hysterectomy (simple, pan-) WITH removal of tubes or ovary

Total hysterectomy removes both the corpus and cervix uteri and may also include a portion of vaginal cuff.

50 Modified radical or extended hysterectomy; radical hysterectomy; extended radical hysterectomy
- **51** Modified radical hysterectomy
- **52** Extended hysterectomy
- **53** Radical hysterectomy; Wertheim's procedure
- **54** Extended radical hysterectomy

60 Hysterectomy, NOS, WITH or WITHOUT removal of tubes and ovaries
- **61** WITHOUT removal of tubes and ovaries
- **62** WITH removal of tubes and ovaries

CERVIX UTERI

SURGERY OF PRIMARY SITE (cont.)

70 Pelvic exenteration

71 Anterior exenteration (includes bladder, distal ureters, and genital organs WITH their ligamentous attachments and pelvic lymph nodes)

The removal of pelvic lymph nodes is also coded under the data item "Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes."

72 Posterior exenteration (includes rectum and rectosigmoid WITH ligamentous attachments and pelvic lymph nodes)

The removal of pelvic lymph nodes is also coded under the data item "Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes."

73 Total exenteration (includes removal of all pelvic contents and pelvic lymph nodes)

The removal of pelvic lymph nodes is also coded under the data item "Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes."

74 Extended exenteration (includes pelvic blood vessels or bony pelvis)

90 Surgery, NOS

99 Unknown if cancer-directed surgery performed; death certificate only

SCOPE OF REGIONAL LYMPH NODE SURGERY

The regional lymph nodes are:

Common iliac
External iliac
Hypogastric (obturator)
Internal iliac
Paracervical
Parametrial
Presacral
Sacral

0 No regional lymph nodes removed

1 Regional lymph node(s) removed, NOS

9 Unknown; not stated; death certificate only

CERVIX UTERI

SURGERY OF OTHER REGIONAL SITES, DISTANT SITES OR DISTANT LYMPH NODES

Do not code the incidental removal of the appendix. **Do not code** an omentectomy **IF** it was the only surgery performed in addition to hysterectomy. (Incidental removal is when an organ is removed for a reason unrelated to the malignancy.)

0 None; no surgery to other regional or distant sites

1 Surgery to other site(s) or node(s), NOS; unknown if regional or distant

2 Other regional site(s)

3 Distant lymph node(s), NOS

4 Periaortic lymph nodes

5 Distant site(s)

6 Combinations of **5** WITH **4**

7 Combination of **5** WITH **2** or **3**

9 Unknown; not stated; death certificate only

RECONSTRUCTION - FIRST COURSE

0 No reconstruction / restoration

1 Vaginal reconstruction

2 Urinary reconstruction

3 Bowel reconstruction / restoration

4 Combination of **3** WITH **1** or **2**

8 Reconstruction / restoration recommended, unknown if performed

9 Unknown; not stated; death certificate only

CORPUS UTERI

C54.0 - C54.9, C55.9

SURGERY OF PRIMARY SITE

For **invasive** cancers, dilation (dilatation) and curettage is coded as an incisional biopsy (**02**) under the data item "Non Cancer-Directed Surgery."

00 None; no cancer-directed surgery of primary site

10 Local tumor destruction, NOS **(WITHOUT PATHOLOGY SPECIMEN)**
- **11** Photodynamic therapy (PDT)
- **12** Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
- **13** Cryosurgery
- **14** Laser
- **15** LEEP

No specimen sent to pathology from this surgical event.

Procedures in code 20 include, but are not limited to:

Cryosurgery

Electrocautery

Excisional biopsy

Laser ablation

Thermal ablation

20 Local tumor destruction or excision, NOS; simple excision, NOS (**WITH PATHOLOGY SPECIMEN**)
- **21** Electrocautery
- **22** Cryosurgery
- **23** Laser
- **24** Excisional biopsy
- **25** Polypectomy
- **26** Myomectomy

Specimen sent to pathology from this surgical event.

Margins of resection may have microscopic involvement.

30 Subtotal hysterectomy / supracervical hysterectomy / fundectomy WITH or WITHOUT removal of tube(s) and ovary(ies).
- **31** WITHOUT tube(s) and ovary (ies)
- **32** WITH tube(s) and ovary (ies)

Cervix is left in place.

40 Total hysterectomy (simple, pan-) WITHOUT removal of tube(s) and ovary (ies)

Total hysterectomy removes both the corpus and cervix uteri. It may also include a portion of the vaginal cuff.

50 Total hysterectomy (simple, pan-) WITH removal of tube(s) or ovary (ies)

Total hysterectomy removes both the corpus and cervix uteri. It may also include a portion of the vaginal cuff.

CORPUS UTERI

SURGERY OF PRIMARY SITE

60 Modified radical or extended hysterectomy; radical hysterectomy; extended radical hysterectomy
- **61** Modified radical hysterectomy
- **62** Extended hysterectomy
- **63** Radical hysterectomy; Wertheim's procedure
- **64** Extended radical hysterectomy

70 Hysterectomy, NOS, WITH or WITHOUT removal of tube(s) and ovary(ies)
- **71** WITHOUT removal of tube(s) and ovary(ies)
- **72** WITH removal of tube(s) and ovary(ies)

80 Pelvic exenteration

- **81** Anterior exenteration (includes bladder, distal ureters, and genital organs WITH their ligamentous attachments and pelvic lymph nodes)

  The removal of pelvic lymph nodes is also coded under the data item "Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes."

- **82** Posterior exenteration (includes rectum and rectosigmoid WITH ligamentous attachments and pelvic lymph nodes)

  The removal of pelvic lymph nodes is also coded under the data item "Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes."

- **83** Total exenteration (includes removal of all pelvic contents and pelvic lymph nodes)

  The removal of pelvic lymph nodes is also coded under the data item "Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes."

- **84** Extended exenteration (includes pelvic blood vessels or bony pelvis)

90 Surgery, NOS

99 Unknown if cancer-directed surgery performed; death certificate only

SCOPE OF REGIONAL LYMPH NODE SURGERY

The regional lymph nodes are:

Common iliac and external iliac
Hypogastric (obturator)
Para aortic
Parametrial
Sacral

0 No regional lymph nodes removed

1 Regional lymph node(s) removed, NOS

- **2** Pariaortic WITH or WITHOUT other regional lymph nodes

9 Unknown; not stated; death certificate only

CORPUS UTERI

SURGERY OF OTHER REGIONAL SITES, DISTANT SITES OR DISTANT LYMPH NODES

Do not code the incidental removal of the appendix. **Do not code** an omentectomy **IF** it was the only surgery performed in addition to hysterectomy. [Incidental removal is when an organ is removed for a reason unrelated to the malignancy.]

0 None; no surgery to other regional or distant sites

1 Surgery to other site(s) or node(s), NOS; unknown if regional or distant

2 Other regional site(s)

3 Distant lymph node(s)

4 Distant site(s)

5 Combination of **4** WITH **2** or **3**

9 Unknown; not stated; death certificate only

RECONSTRUCTION - FIRST COURSE

0 No reconstruction / restoration

1 Vaginal reconstruction

2 Urinary reconstruction

3 Bowel reconstruction / restoration

4 Combination of **3** WITH **1** or **2**

8 Reconstruction / restoration recommended, unknown if performed

9 Unknown; not stated; death certificate only

OVARY

C56.9

SURGERY OF PRIMARY SITE

00 None; no cancer-directed surgery of primary site

10 Total removal of tumor or (single) ovary, NOS
- **11** Resection of ovary (wedge, subtotal, or partial) ONLY, NOS; unknown if hysterectomy done
  - **12** WITHOUT hysterectomy
  - **13** WITH hysterectomy
- **14** Unilateral (salpingo-) oophorectomy; unknown if hysterectomy done
  - **15** WITHOUT hysterectomy
  - **16** WITH hysterectomy

20 Bilateral (salpingo-)oophorectomy; unknown if hysterectomy done
- **21** WITHOUT hysterectomy
- **22** WITH hysterectomy

30 Unilateral or bilateral (salpingo-) oophorectomy **WITH OMENTECTOMY**, NOS; partial or total; unknown if hysterectomy done
- **31** WITHOUT hysterectomy
- **32** WITH hysterectomy

60 Debulking; cytoreductive surgery, NOS
- **61** WITH colon (including appendix) and/or small intestine resection (not incidental)
- **62** WITH partial resection of urinary tract (not incidental)
- **63** Combination of **61** and **62**

Debulking is a partial removal of the tumor mass and can involve the removal of multiple organ sites. It may include removal of ovaries and/or the uterus (a hysterectomy). The pathology report may or may not identify ovarian tissue. A debulking is usually followed by another treatment modality, such as chemotherapy.

70 Pelvic exenteration, NOS

- **71** Anterior (includes bladder, distal ureters, and genital organs WITH their ligamentous attachments and pelvic lymph nodes)

  The removal of pelvic lymph nodes is also coded under the data item "Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes."

- **72** Posterior (includes rectum and rectosigmoid WITH ligamentous attachments and pelvic lymph nodes)

  The removal of pelvic lymph nodes is also coded under the data item "Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes."

- **73** Total (includes removal of all pelvic contents and pelvic lymph nodes)

  The removal of pelvic lymph nodes is also coded under the data item "Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes."

- **74** Extended (includes pelvic blood vessels or bony pelvis)

80 (Salpingo-) oophorectomy, NOS

90 Surgery, NOS

99 Unknown if cancer-directed surgery performed; death certificate only

OVARY

SCOPE OF REGIONAL LYMPH NODE SURGERY

The regional lymph nodes are:

Common iliac
External iliac
Hypogastric (obturator)
Inguinal
Lateral sacral
Paraaortic
Pelvic, NOS
Retroperitoneal, NOS

0 No regional lymph nodes removed

1 Regional lymph node(s) removed, NOS

9 Unknown; not stated; death certificate only

SURGERY OF OTHER REGIONAL SITES, DISTANT SITES OR DISTANT LYMPH NODES

Do not code an incidental removal of the appendix. (Incidental removal is when an organ is removed for a reason unrelated to the malignancy.)

0 None; no surgery to other regional or distant sites

1 Surgery to other site(s) or node(s), NOS; unknown if regional or distant

2 Other regional site(s)

3 Distant lymph node(s)

4 Distant site(s)

5 Combination of **4** WITH **2** or **3**

9 Unknown; not stated; death certificate only

RECONSTRUCTION - FIRST COURSE

0 No reconstruction / restoration

1 Urinary reconstruction

2 Bowel reconstruction / restoration

3 Combination of **1** and **2**

8 Reconstruction / restoration recommended, unknown if performed

9 Unknown; not stated; death certificate only

PROSTATE

C61.9

SURGERY OF PRIMARY SITE

Do not code an orchiectomy in this field. For prostate primaries, orchiectomies are coded in the field "Hormone Therapy."

00 None; no cancer-directed surgery of primary site

10 Local tumor destruction or excision, NOS
- **11** Transurethral resection (TURP), NOS
  - **12** TURP - cancer is incidental finding during surgery for benign disease
  - **13** TURP - patient had suspected/known cancer
- **14** Cryoprostatectomy
- **15** Laser
- **16** Hyperthermia
- **17** Other method of local resection or destruction

30 Subtotal or simple prostatectomy, NOS (a segmental resection or enucleation leaving the capsule intact)

40 Less than total prostatectomy, NOS (an enucleation using an instrument such as a Vapotrode which may leave all or part of the capsule intact)

50 Radical prostatectomy, NOS
Total prostatectomy, NOS

These procedures include excision of prostate, prostatic capsule, ejaculatory ducts, seminal vesicle(s), and may include a narrow cuff of bladder neck.

70 Prostatectomy WITH en bloc resection of other organs; pelvic exenteration

Surgeries coded **70** are any prostatectomy WITH an en bloc resection of any other organs. The other organs may be partially or totally removed. En bloc resection is the removal of organs in one piece at one time. Procedures that may involve an en bloc resection include, but are not limited to: cystoprostatectomy, radical cystectomy, prostatectomy.

80 Prostatectomy, NOS

90 Surgery, NOS

99 Unknown if cancer-directed surgery performed; death certificate only

PROSTATE

SCOPE OF REGIONAL LYMPH NODE SURGERY

The regional lymph nodes are:

Hypogastric
Iliac, NOS (internal and external)
Obturator
Pelvic, NOS
Periprostatic
Sacral, NOS (lateral presacral, promontory [Gerota's] or NOS)

0 No regional lymph nodes removed

1 Regional lymph node(s) removed, NOS

9 Unknown; not stated; death certificate only

SURGERY OF OTHER REGIONAL SITES, DISTANT SITES OR DISTANT LYMPH NODES

Do not code orchiectomy here. For prostate primaries, code orchiectomies under "Hormone Therapy."

The most commonly removed **distant** lymph nodes are: aortic (para-aortic, peri-aortic, lumbar); common iliac; inguinal; superficial inguinal (femoral); supraclavicular; cervical; and scalene.

0 None; no surgery to other regional or distant sites

1 Surgery to other site(s) or node(s), NOS; unknown if regional or distant

2 Other regional site(s)

3 Distant lymph node(s)

4 Distant site(s)

5 Combination of **4** WITH **2** or **3**

9 Unknown; not stated; death certificate only

RECONSTRUCTION - FIRST COURSE

0 No reconstruction / restoration

1 Reconstruction / restoration, NOS

2 Collagen injection for incontinence

3 Penile prosthesis

4 Artificial urinary sphincter

5 Combinations of **4** WITH **2** or **3**

9 Unknown; not stated; death certificate only

TESTIS

C62.0 - C62.9

SURGERY OF PRIMARY SITE

00 None; no cancer-directed surgery of primary site

10 Local or partial excision of testicle

30 Excision of testicle, NOS WITHOUT cord

40 Excision of testicle, NOS WITH cord, /or cord not mentioned

80 Orchiectomy, NOS

90 Surgery, NOS

99 Unknown if cancer-directed surgery performed; death certificate only

SCOPE OF REGIONAL LYMPH NODE SURGERY

The regional lymph nodes are:

Interaortocaval
Paraaortic (Periaortic)
Paracaval
Preaortic
Precaval
Retroaortic
Retrocaval

0 No regional lymph nodes removed

1 Regional lymph node(s) removed, NOS; not stated if bilateral or unilateral

- **2** Unilateral regional lymph nodes
- **3** Bilateral regional lymph nodes

9 Unknown; not stated; death certificate only

TESTIS

SURGERY OF OTHER REGIONAL SITES, DISTANT SITES OR DISTANT LYMPH NODES

0 None; no surgery to other regional or distant sites

1 Surgery to other site(s) or node(s), NOS; unknown if regional or distant

2 Other regional sites

3 Distant lymph node(s)

4 Distant site(s)

5 Combination of **4** WITH **2** or **3**

9 Unknown; not stated; death certificate only

RECONSTRUCTION - FIRST COURSE

0 No reconstruction / restoration

1 Testicular implant

8 Reconstruction / restoration recommended, unknown if performed

9 Unknown; not stated; death certificate only

KIDNEY, RENAL PELVIS, and URETER

C64.9, C65.9, C66.9

SURGERY OF PRIMARY SITE

00 None; no cancer-directed surgery of primary site

10 Local tumor destruction, NOS **(WITHOUT PATHOLOGY SPECIMEN)**
- **11** Photodynamic therapy (PDT)
- **12** Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
- **13** Cryosurgery
- **14** Laser

No specimen sent to pathology from this surgical event.

20 Local tumor excision, NOS (**WITH PATHOLOGY SPECIMEN**)
- **21** Photodynamic therapy (PDT)
- **22** Electrocautery
- **23** Cryosurgery
- **24** Laser ablation
- **25** Laser excision
- **26** Polypectomy
- **27** Excisional biopsy

Specimen sent to pathology from this surgical event.

Procedures coded 30 include, but are not limited to:

Cryosurgery
Electrocautery
Excisional biopsy
Laser
Segmental resection
Thermal ablation
Wedge resection

30 Partial or subtotal nephrectomy (kidney or renal pelvis) or partial ureterectomy (ureter)

Margins of resection are grossly negative. There may be microscopic involvement.

40 Complete / total / simple nephrectomy - for kidney parenchyma
Nephroureterectomy

These procedures include bladder cuff for renal pelvis or ureter.

50 Radical nephrectomy (may include removal of a portion of vena cava, adrenal gland(s), Gerota's fascia, perinephric fat, or partial / total ureter)

KIDNEY, RENAL PELVIS, and URETER

SURGERY OF PRIMARY SITE (cont.)

70 Any nephrectomy (simple, subtotal, complete, partial, simple, total, radical) **PLUS** an en bloc resection of other organ(s) (colon, bladder)

The other organs, such as colon or bladder, may be partially or totally removed.

80 Nephrectomy, NOS
Ureterectomy, NOS

90 Surgery, NOS

99 Unknown if cancer-directed surgery performed; death certificate only

SCOPE OF REGIONAL LYMPH NODE SURGERY

The regional nodes for each site are:

Kidney	Renal Pelvis	Ureter
Aortic (para-aortic, periaortic, lateral aortic)	Aortic	Iliac [common, internal (hypogastric), external]
Paracaval	Paracaval	Paracaval
Renal hilar	Renal hilar	Pelvic, NOS
Retroperitoneal, NOS	Retroperitoneal, NOS	Periureteral
		Renal hilar

0 No regional lymph nodes removed

1 Regional lymph node(s) removed, NOS; not stated if bilateral or unilateral

2 Unilateral regional lymph nodes

3 Bilateral regional lymph nodes

9 Unknown; not stated; death certificate only

KIDNEY, RENAL PELVIS, and URETER

SURGERY OF OTHER REGIONAL SITES, DISTANT SITES OR DISTANT LYMPH NODES

Do not code the incidental removal of ribs during the operative approach (ribs removed to provide access).

0 None; no surgery to other regional or distant sites

1 Surgery to other site(s) or node(s), NOS; unknown if regional or distant

2 Other regional site(s)

3 Distant lymph node(s)

4 Distant site(s)

5 Combination of **4** WITH **2** or **3**

9 Unknown; not stated; death certificate only

RECONSTRUCTION - FIRST COURSE

0 No reconstruction / restoration

1 Kidney transplant (primary site)

8 Reconstruction / restoration recommended, unknown if performed

9 Unknown; not stated; death certificate only

BLADDER

C67.0 - C67.9

SURGERY OF PRIMARY SITE

00 None; no cancer-directed surgery of primary site

10 Local tumor destruction, NOS **(WITHOUT PATHOLOGY SPECIMEN)**
- **11** Photodynamic therapy (PDT)
- **12** Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
- **13** Cryosurgery
- **14** Laser

No specimen sent to pathology from this surgical event.

20 Local tumor excision, NOS (**WITH PATHOLOGY SPECIMEN**)
- **21** Photodynamic therapy (PDT)
- **22** Electrocautery
- **23** Cryosurgery
- **24** Laser ablation
- **25** Laser excision
- **26** Polypectomy
- **27** Excisional biopsy (TURB)

Specimen sent to pathology from this surgical event.

30 Partial cystectomy

50 Simple / total / complete cystectomy

60 Radical cystectomy (male only)

This code is used only for males. A radical cystectomy in a male involves the removal of the bladder and prostate, with or without urethrectomy. (If a radical cystectomy is performed on a female, use code **71**.)

70 Pelvic exenteration, NOS
- **71** Radical cystectomy (female only); anterior exenteration

  A radical cystectomy in a female includes removal of the bladder, uterus, ovaries, entire vaginal wall and entire urethra. (If a radical cystectomy is performed on a male, use code **60**.)
- **72** Posterior exenteration
- **73** Total exenteration (includes removal of all pelvic contents and pelvic lymph nodes)
- **74** Extended exenteration (includes pelvic blood vessels or bony pelvis)

80 Cystectomy, NOS

90 Surgery, NOS

99 Unknown if cancer-directed surgery performed; death certificate only

BLADDER

SCOPE OF REGIONAL LYMPH NODE SURGERY

The regional lymph nodes are:

Hypogastric
Iliac (internal, external, NOS)
Obturator
Pelvic, NOS
Perivesical, pericystic
Presacral
Sacral [lateral, sacral promontory (Gerota's)]

0 No regional lymph nodes removed

1 Regional lymph node(s) removed, NOS; not stated if bilateral or unilateral

2 Unilateral regional lymph nodes

3 Bilateral regional lymph nodes

9 Unknown; not stated; death certificate only

SURGERY OF OTHER REGIONAL SITES, DISTANT SITES OR DISTANT LYMPH NODES

Do not code the partial or total removal of a ureter during a cystectomy.

0 None; no surgery to other regional or distant sites

1 Surgery to other site(s) or node(s), NOS; unknown if regional or distant

2 Other regional site(s)

3 Distant lymph node(s)

4 Distant site(s)

5 Combination of **4** WITH **2** or **3**

9 Unknown; not stated; death certificate only

BLADDER

RECONSTRUCTION - FIRST COURSE

0 No reconstruction / restoration

1 Conduit diversion

2 Continent reservoir (a bladder substitute)

Types of continent reservoirs include, but are not limited to:

Hemi-Kock
Ileal reservoir
Ileocecal reservoir
Indiana or Mainz pouch
Koch
Studer pouch
W-shaped ileoneobladder by Hautmann

8 Reconstruction / restoration recommended, unknown if performed

9 Unknown; not stated; death certificate only

BRAIN and OTHER PARTS OF CENTRAL NERVOUS SYSTEM

C70.0 - C70.9 Meninges
C71.0 - C71.9 Brain
C72.0 - C72.9 Other Parts of Central Nervous System

SURGERY OF PRIMARY SITE

DO NOT CODE laminectomies for spinal cord primaries.

00 None; no cancer-directed surgery of primary site

10 Local tumor destruction

20 Excision of tumor, lesion, or mass
- **21** Subtotal resection, NOS
- **22** Partial resection (more than half of tumor resected, but less than total resection)
- **23** Debulking (more than 5% of tumor removed, but less than half)

30 Excision of tumor, lesion, or mass, NOS
- **31** Total resection
- **32** Gross resection

40 Partial resection, NOS
- **41** Partial lobe
- **42** Partial meninges
- **43** Partial nerve(s)

50 Total resection (lobectomy of brain)

60 Radical resection (resection of primary site plus partial or total removal of surrounding organs / tissue)

90 Surgery, NOS

99 Unknown if cancer-directed surgery performed; death certificate only

BRAIN and OTHER PARTS OF CENTRAL NERVOUS SYSTEM

SCOPE OF REGIONAL LYMPH NODE SURGERY

There are **NO regional lymph nodes** for the **brain**. Code "unknown" (**9**) for all brain primaries (C70.0, C71._). **Central nervous system** sites, however, **do** have regional lymph nodes.

0 No regional lymph nodes removed

1 Regional lymph node(s) removed, NOS

9 Unknown; not stated; death certificate only

SURGERY OF OTHER REGIONAL SITES, DISTANT SITES OR DISTANT LYMPH NODES

0 None; no surgery to other regional or distant sites

1 Surgery to other site(s) or node(s), NOS; unknown if regional or distant

- **2** Other regional site(s)
- **5** Distant lymph node(s)
- **6** Distant site(s)
- **7** Combination of **6** WITH **2** or **5**

9 Unknown; not stated; death certificate only

RECONSTRUCTION - FIRST COURSE

Use the following code only:

9 Not applicable (There are no known reconstructive procedures for this site.)

THYROID GLAND

C73.9

SURGERY OF PRIMARY SITE

00 None; no cancer-directed surgery of primary site

10 Removal of less than a lobe, NOS
- **11** Local surgical excision
- **12** Removal of a partial lobe ONLY

20 Lobectomy and/or isthmectomy
- **21** Lobectomy ONLY
- **22** Isthmectomy ONLY
- **23** Lobectomy WITH isthmus

30 Removal of a lobe and partial removal of the contralateral lobe

40 Subtotal or near total thyroidectomy

50 Total thyroidectomy

80 Thyroidectomy, NOS

90 Surgery, NOS

99 Unknown if cancer-directed surgery performed; death certificate only

SCOPE OF REGIONAL LYMPH NODE SURGERY

The regional lymph nodes are the cervical and upper mediastinal lymph nodes.

0 No regional lymph nodes removed

1 Regional lymph node(s) removed, NOS

- **2** Neck dissection, NOS
  - **3** Selective, limited; nodal sampling; "berry picking"
  - **4** Modified / modified radical
  - **5** Radical

9 Unknown; not stated; death certificate only

Terminology of neck dissection (Robbins et al. 1991):

A radical neck dissection includes the removal of all ipsilateral cervical lymph node groups, i.e., lymph nodes from levels I through V (submental, submandibular, cranial jugular, medial jugular, caudal jugular, dorsal cervical nodes along the accessory nerve, and supraclavicular), and removal of the spinal accessory nerve, internal jugular vein and sternocleidomastoid muscle.

In a modified radical neck dissection, the same lymph nodes are removed as in a radical neck dissection; however, one or more non-lymphatic structures are preserved.

A selective neck dissection is a neck dissection with preservation of one or more lymph node groups routinely removed in radical neck dissection.

THYROID GLAND

SURGERY OF OTHER REGIONAL SITES, DISTANT SITES OR DISTANT LYMPH NODES

0 None; no surgery to other regional or distant sites

1 Surgery to other site(s) or node(s), NOS; unknown if regional or distant

2 Other regional site(s)

3 Distant lymph node(s)

4 Distant site(s)

5 Combination of **4** WITH **2** or **3**

9 Unknown; not stated; death certificate only

RECONSTRUCTION - FIRST COURSE

Use the following code only:

9 Not applicable (There are no known reconstructive procedures for this site.)

ALL OTHER SITES

C14.2; C14.8	**Waldeyer ring; Overlapping lesion of lip, oral cavity and pharynx**
C17.0 - C17.9	**Small Intestine**
C23.9	**Gallbladder**
C24.0 - C24.9	**Other and Unspecified Parts of Biliary Tract**
C26.0 - C26.9	**Other and Ill-Defined Digestive Organs**
C30.0 - C30.1	**Nasal Cavity and Middle Ear**
C31.0 - C31.9	**Accessory Sinuses**
C33.9	**Trachea**
C37.9	**Thymus**
C38.0 - C38.8	**Heart, Mediastinum, and Pleura**
C39.0 - C39.9	**Other and Ill-Defined Sites Within Respiratory System and Intrathoracic Organs**
C42.0, C42.1	**Blood, Bone marrow**
C42.3, C42.4	**Reticuloendothelial system, Hematopoietic system**
C48.0 - C48.8	**Retroperitoneum and Peritoneum**
C51.0 - C51.9	**Vulva**
C52.9	**Vagina**
C57.0 - C57.9	**Other and Unspecified Female Genital Organs**
C58.9	**Placenta**
C60.0 - C60.9	**Penis**
C63.0 - C63.9	**Other and Unspecified Male Genital Organs**
C68.0 - C68.9	**Other and Unspecified Urinary Organs**
C69.0 - C69.9	**Eye and Adnexa**
C74.0 - C74.9	**Adrenal Gland**
C75.0 - C75.9	**Other Endocrine Glands and Related Structures**
C76.0 - C76.8	**Other and Ill-Defined Sites**
C80.9	**Unknown Primary Site**

SURGERY OF PRIMARY SITE

00 None; no cancer-directed surgery of primary site

10 Local tumor destruction, NOS **(WITHOUT PATHOLOGY SPECIMEN)**
- **11** Photodynamic therapy (PDT)
- **12** Electrocautery' fulguration
- **13** Cryosurgery
- **14** Laser

No specimen sent to pathology from this surgical event.

20 Local tumor excision, NOS (**WITH PATHOLOGY SPECIMEN**)
- **21** Photodynamic therapy (PDT)
- **22** Electrocautery
- **23** Cryosurgery
- **24** Laser ablation
- **25** Laser excision
- **26** Polypectomy
- **27** Excisional biopsy

Specimen sent to pathology from this surgical event.

ALL OTHER SITES

SURGERY OF PRIMARY SITE (cont.)

30 Simple / partial surgical removal of primary site

40 Total surgical removal of primary site; enucleation

50 Surgery stated to be "debulking"

60 Radical surgery (partial or total removal of the primary site WITH an en bloc resection (partial or total removal) of other organs)

90 Surgery, NOS

99 Unknown if cancer-directed surgery performed; death certificate only

SCOPE OF REGIONAL LYMPH NODE SURGERY

For an unknown primary site (C80.9) and leukemias, enter code 9 only.

0 No regional lymph nodes removed

1 Regional lymph node(s) removed, NOS

9 Unknown; not stated; death certificate only

SURGERY OF OTHER REGIONAL SITES, DISTANT SITES OR DISTANT LYMPH NODES

0 None; no surgery to other regional or distant sites

1 Surgery to other site(s) or node(s), NOS; unknown if regional or distant

- **2** Other regional sites
- **3** Distant lymph node(s)
- **4** Distant site(s)
- **5** Combination of **4** WITH **2** or **3**

9 Unknown; not stated; death certificate only

RECONSTRUCTION - FIRST COURSE

Use the following code only:

ALL OTHER SITES

9 Not applicable (At this time, reconstructive procedures are not being collected for these sites.)

Appendix E

Massachusetts Cancer Registry

Automated Edits Reference Guide

NAACCR Layouts 9 and 9.1; EDITS version 9A

November 2001

INTRODUCTION

The EDITS Edits System

The Massachusetts Cancer Registry (MCR) uses automated (computerized) edits as part of our quality assurance efforts. These edits originate in the "EDITS" software system developed by the Centers for Disease Control and Prevention. The North American Association of Central Cancer Registries (NAACCR) promotes the use of the EDITS system to help central registries improve their data quality and meet required NAACCR data standards.

The edits themselves come from the standard-setting organizations like the SEER program, COC and NAACCR. Each of these groups, having different data needs and (sometimes) different requirements for the same data, have contributed slightly different versions of some edits. Registries may choose which edits and edit versions within the EDITS system that they wish to use to check their data by creating their own sets of edits to run. Most of the data fields collected by SEER, COC and NAACCR registries have at least one edit to check them. There are hundreds of standard edits from which to choose. The MCR has also created some specialized edits for our own use, and has modified some of the other groups' edits to better check MCR data. (The names of these edits usually include "MCR" or "MCR-CIMS".) We collect about 100 data fields and use about 200 automated edits. The MCR runs edits in “batch mode”, i.e., we run the edits on batches of finished case records. Edits from the EDITS system may also be run "interactively", i.e., during data entry as fields are filled.

Automated edits are a useful tool for quickly checking the data quality of large numbers of case records. A case record that passes all automated edits, however, may still contain problems. Even if a registry were to run one version of each of the hundreds of edits available in the EDITS system, its data quality would not necessarily be perfect. Automated edits can only check coded fields easily; they do not “read” narratives, even to search for certain key words; they do not interpret or make decisions; they cannot replace the careful review of a knowledgeable registrar.

MCR Edit Reports

Automated edits are used at different points during MCR operations. When a floppy diskette is received from one of our reporting facilities, the case records are first “scanned” to see if the data are in the correct file format (NAACCR Case Record Layout 9 or 9.1) to be used by our data system, the Massachusetts Cancer Registry - Cancer Information System (CIMS). If the format is correct, a set of automated edits are then used to test the quality of the data. We call this set of edits the "Scan Edit Set". A printed edit report identifies case records that have not passed at least one edit, the names of the edits that were not passed for each case record, and the total number of times each edit failed in the whole data submission. A copy of this edit report is sent back to the reporting facility. If too many problems are detected by this process, the MCR may reject the entire data submission.

If the data submission is accepted, the case records are uploaded into the Holding Database of our data system. When the case records are processed by MCR staff, another set of edits is run to identify problems. We call this set of edits our Production Edit Set (it is almost identical to the Scan Edit Set). Our staff also visually review the cases to look for problems that the automated edits do not check, and text fields (narratives) are read and compared with coded fields. A case record cannot be saved into our main (Master) database until it has passed all of our automated edits and has been visually reviewed. Certain edits in the Production Edit Set identify diagnoses that are not reportable to the MCR, were diagnosed before 1995, or occurred in non-Massachusetts residents. Such cases are not allowed into our Master Database, but they are flagged appropriately and remain in our Holding Database.

When you receive an edit report from the MCR, we hope that this Appendix will help you determine what may have been questionable or incorrect in your data submissions. You may later receive additional feedback about your data quality from our staff as they process and visually review your case records.

The NAACCR 9 and 9.1 Layouts

The MCR accepts case records in the NAACCR Case Record Layout Versions 9 or 9.1 ("V9.1"). These layouts are intended for cases diagnosed in 2001 and 2002 respectively, and may also be referred to as the "2001" or "2002" NAACCR formats or layouts. A case record in V9.1 (or 9) layout contains a total of 5966 characters in more than 300 data fields. The value for each field is kept in an assigned location within the layout. For example, the 2-digit code for Primary Payer at Diagnosis is kept in the 329th and 330th character positions (columns). There are no physical differences between Versions 9 and 9.1 -- all of the fields are in the same places in both Versions. When you create a data file for submission to the MCR, your data system outputs the case records in V9.1 (or 9) by selecting the appropriate fields and placing them in the proper locations. This process is probably invisible to you.

The MCR only collects about 100 data fields from the V9.1 layout. Our data system searches your outputted case records by looking in the appropriate locations to find the fields that we want. For example, our system selects the 329th and 330th characters from each of your case records and copies them into our Primary Payer at Diagnosis field. If your data system does not have certain fields that the MCR collects, your system should fill these fields with something automatically when you create your MCR data file.

If your case records do not come out of your system in Version 9.1 (or 9) layout, our system will not be able to process them and the data will be rejected. If a data field ends up in the wrong place within the case records that you send us, or if our data system looks in the wrong location to find some data field, then the data that we see at the MCR may not make sense. Having all of the fields in exactly the correct locations is crucial.

How to Use This Appendix

When you receive an edit report from the MCR, you may need help in understanding what was questionable or incorrect in your case records. Each edit that appears on your edit report has a certain name in our Scan Edit Set. The edit names are listed alphabetically on pages 7-10 in this Appendix with the page number where a description of each edit can be found. Each edit is also given a "MCR Edit #"; if you have questions about a particular edit, it may be easier to refer to this number rather than the long edit name when talking to us.

When a case record has failed an edit, the edit report lists the name of each data field involved in that edit. These are the V9.1 field names. If you are not familiar with a field name or are not sure of the corresponding field in your data system, each field name is listed alphabetically on pages 11-13 of this Appendix with its Item # in V9.1 and its starting and ending positions in the V9.1 layout. The corresponding fields in the MCR Abstracting and Coding Manual and ROADS Manual are given. The ROADS field names reflect changes issued by the ACoS in their "Surgery Code Clarifications", last revised on March 16, 2000. Within the main body of the MCR Manual, each field is also listed with its V9.1 name (if different than the MCR name), Item # and position.

The edits that involve each field are listed on pages E-17-22 in this Appendix. The fields are listed alphabetically by their V9.1 names. The validity check or character check on each field is listed first, followed alphabetically by any other edits that involve that field. The number next to each edit name is the MCR Edit #.

Pages E-7-10 in this Appendix provide the page where each edit's description can be found. The edit descriptions begin on page E-25, ordered alphabetically by edit name. The edit names are bold. All fields involved with the edit are listed, using their V9.1 names. For single-field edits, that field's length follows its name.

When you have a question about why a case record failed a certain edit, consult the edit's description. Use pages E-13-16 if you're not sure about the field(s) involved. Some terms and symbols used in the edit descriptions may be unfamiliar and are included on pages E-3-4.

Edit reports include the value (usually a code) that our data system found in each data field involved in each edit. If the value for a field shown on your edit report differs from the value you find on your data system, there may be a problem with your data system or ours; or the field may have been changed on your system after the case record was sent to the MCR.

Strange Terms/Definitions Used in this Appendix

blank check	not a generous gift; rather, an edit that checks whether a data field is empty or not; a blank check fails if the field is empty when it should contain something
blank-filled	when a filled-in data field does not contain enough characters to fill it completely, your data system may automatically fill the remainder of the field with blanks; example -- the AJCC Clinical Stage Group field must contain 2 characters, so if you fill in only the first character, your system may fill the second character in with a blank space for you because the field must be completely filled
case record	the electronic version of a MCR Cancer Patient Abstract; a data record that contains the data pertaining to one cancer case; 5966 characters long in V9.1
character check	an edit that checks the type of characters in a data field; if a field should only contain a number, for example, a character check run on that field would fail if the field contained a letter, punctuation mark, etc.
data field	also known as a data item or just "field"; a particular category of data within a data table, database or data record (row in a data table); for example, in a MCR case record, there are data fields that contain codes for "Place of Death" and "Birth Place"
digit	a single number (**0**-**9**)
embedded hyphen	a hyphen (dash) (-) in a data field that is not the first character in the field; in "A-B", the hyphen is embedded
embedded space	a space character (as when you have hit the spacebar on a keyboard) within a data field that is not the first character in that field; if a field contains **a_b**, there is an embedded space between the **a** and **b** characters
empty field	when nothing whatsoever is in a data field, it is empty; we try to avoid calling this a "blank field" because that could imply that blanks (spacebars) have been entered into it or that it was automatically blank-filled
error message	a short phrase that is produced automatically when an edit fails; the message may indicate what the edit found and did not like about the data being checked; some edits produce several different error messages, depending on exactly what problem was detected
field	same as data field
leading space	a space character that is the first character in a data field; if a field contains **_2**, the **2** is preceded by a leading space
length	the number of characters that fill a data field completely; the MCR data field for patient's age, for example, is 3 digits long; the field for patient's usual occupation has a 40-character length
look-up table	when an edit is checking for certain values in a data field and the number of acceptable values for the field is very lengthy, those acceptable values may be stored in a data table in the EDITS system rather than within the edit itself; for example, the many standard codes for "Place of Birth" are kept in a look-up table, while the 2 standard codes for "Vital Status" are written right into its validity check

V9.1	the North American Association of Central Cancer Registries Case Record Layout Version 9 or 9.1; these layouts date from May 2000 (with errata issued August 2000) and March 2001; may also be called the "2001" and "2002" formats because they are meant to apply to cases diagnosed in 2001 and 2002, respectively; a case record in V9.1 format contains 5966 characters
over-ride	a way to bypass a certain edit or edits for a case record by using "flag" fields; if the over-ride flag associated with an edit contains a certain value (usually **1**), that edit skips that case record; example -- if a prostate cancer is diagnosed in a very young man, and if the edit named "Age, Primary Site, Morphology (NAACCR IF15)" finds its over-ride flag field empty, it will ask that the coding of the case be double-checked; if the age and diagnosis are correct, check the appropriate flag on your system to over-ride the edit; when the edit runs again on that case, the edit will see a **1** in its flag field and will then stop checking that case record
symbol	any keyboard character that is not a letter or number
validity check	an edit that compares the contents of a single data field with a set of acceptable standard codes; it fails when the field's contents do not match one of the acceptable codes; the validity check on Vital Status checks that the field contains either **0** or **1**, for example

Standard Symbols Used Strangely in this Appendix

> "is greater than"
> example: "Histologic Type > **8790**" means "The Histologic Type Code has a value greater than **8790**."

< "is less than"
example: "Histologic Type < **9590**" means "The Histologic Type Code has a value less than **9590**."

≥ "is greater than or equal to"
example: "Histologic Type ≥ **9590**" means "The Histologic Type Code has a value of at least **9590**."

≤ "is less than or equal to"
example: "Histologic Type ≤ **9804**" means "The Histologic Type Code has a value of **9804** at most."

\- "through...inclusive"
example: "Behavior = **0 - 3**" means "The Behavior Code has a value of **0, 1**, **2** or **3**."

= "is equal to" or "may be equal to"
example: "Laterality = **0 - 4** or **9**" means "The Laterality Code has a value of **0**, **1**, **2**, **3**, **4** or **9**."

<> "is not equal to"
example: "Behavior Code <> **0** or **1**" means "The Behavior Code has a value that is neither **0** nor **1**."

_ a space character, as in the (usually) invisible character produced when you hit the spacebar on a keyboard;
example: **1**_ indicates that there are two characters here -- a code **1** followed by a space; it does not indicate a code **1** followed by an underlined space.

Types of Edits

Single-Field Edits

A single-field edit examines the contents of one data field only.

Some edits are described as “blank checks”. This type of edit merely checks whether a data field is blank (empty) or contains something. None of the MCR’s coded fields should be empty. The only narrative (free text) fields which may be empty are the Comments/Narrative Remarks field, treatment narratives for which that type of therapy was not performed during the first course of treatment, and Staging Narratives if they do not apply to a certain case. For nonanalytic cases, all narrative fields may be empty. To avoid leaving fields empty, use unknown/not applicable codes and the text "Unknown" as necessary.

Some single-field edits are “character checks”. This kind of edit examines the type of characters entered into a field. It may check if each character is a letter, number, space, or symbol (all of the other characters on a keyboard, like !@#$%<>?,.;}). For example, there is an edit which checks if the Middle Name field contains anything but letters.

Most single-field edits are “validity checks”. Each of these looks for certain values in a field; anything else found in the field will cause the edit to fail. For example, the validity check on Vital Status only accepts the codes **0** or **1**. Validity checks on date fields are more complex because different values for day, month and year must be evaluated, and the entire date as a whole is also checked.

Interfield and Multifield Edits

These more complex edits check the values in two or more fields at once. These edits are looking for incompatibility among the codes in different fields. For example, an interfield edit between the fields Vital Status and Place of Death checks that a patient is not coded as “alive” and coded as having died somewhere within the same case record.

Unlike single-field edits, these edits are not implying that there is an error in any one field. They are saying, “The codes in these fields don’t make sense together. One or all of them may be wrong.”

Many interfield and multifield edits are set to skip over a case record if the fields involved contain invalid codes or empty fields. For example, if a case record contains a bad Behavior Code of “**8**”, then many of the interfield and multifield edits that involve Behavior will not bother to check that case. Suppose edits are run on a case and there is only one error reported -- an invalid Primary Site Code. If you fix that one bad code and re-run the edits, you may find that there are several new errors reported -- because the many multifield edits involving Primary Site Code did not touch the case before. This is why edits should be re-run whenever changes are made in a case. Furthermore, changing the value in one field to satisfy one edit may then cause a different edit to complain.

Inter-Record Edits

This type of edit looks at codes in two or more cases at once. For example, if you have a patient on your data system recorded with two primary tumors, you might use an inter-record edit to check that the patient’s gender is coded consistently in both records; another inter-record edit might check that the two diagnoses are not considered a single primary. Although the SEER registries have experience running edits between case records, there are no such edits in the EDITS system. The MCR occasionally runs some SEER inter-record edits outside the EDITS system, but not on incoming data from our reporting facilities.

Pass/Fail/Skip, Warnings and Error Messages

Most edits are “pass/fail”. That is, the edit checks the appropriate field(s) in a case record and the edit either passes or fails for that case. An edit may begin to check a record, detect a certain code that tells it to not bother checking any further, and then immediately halt and “skip” that record.

Some edits may pass, fail or produce a “warning” instead of failing. When the edits are run, these may be set to produce warnings instead of failures. The MCR sets its edit reports to suppress warnings (i.e., to produce failures rather than warnings).

When an edit fails for a case record, an “error message” is produced. This message is an English phrase and will appear when an edit report is printed. The error messages are supposed to provide some indication of what the edit did not like about the case, although sometimes they are not much help in figuring out what is wrong. Some edits will produce one of several different error messages, depending on exactly what type of problem was found.

Over-Rides

The failure of a few interfield edits can be over-ridden. When these edits fail, they are not indicating that something is definitely wrong with the case. They are instead saying, “I question this combination of codes. It’s very unusual.” Someone must examine the fields in question and change or verify them. If the codes entered are indeed correct, an “over-ride flag” field can be used to make the edit pass.

For example, an over-rideable edit compares a patient’s age with his/her diagnosis. If a 40-year old man has prostate cancer, this edit will question this combination because he's unusually young for this disease. If the age and diagnosis are indeed accurate, the over-ride for this edit can be set so that the edit will pass the case.

The edits that can be over-ridden look at the codes in certain fields (over-ride “flags”) within the case record itself to decide if they have been over-ridden or not for that case. Once an edit is over-ridden for a case, it will continue to always pass that case unless someone changes its over-ride flag to cause the edit to fail again. Even if you have set over-ride flags on your data system to pass certain edits for certain cases, the MCR cannot "take your word" automatically that those flags should really have been set. We must verify unusual code combinations ourselves and set our own over-ride flags appropriately on our system. We rely on remarks in Narrative fields to confirm that *you* have indeed verified any unusual code combinations at your facility. We do not look at the over-ride flags you have set when we see your cases!

NAACCR 9A Automated Edits

Being Run by the Massachusetts Cancer Registry

sorted by Name of Edit

November 2001

Data Fields Collected by Massachusetts Cancer Registry from NAACCR V9.1 Layout

and Corresponding Fields in MCR and ROADS Manuals

(arranged alphabetically by V9.1 field name*)

November 2001

V9.1 Field Name	Item #	Position	Field in the MCR Manual	Field in the ROADS Manual
Abstracted By	570	297-299	Abstracted By, p. 38	Abstracted by, p. 89
Accession Number--Hosp	550	289-294	Accession Number, p. 31	Accession number, p. 38
Addr at DX--City	70	22-41	City / Town at Diagnosis, p. 49	City/town at diagnosis, p. 56
Addr at DX--No & Street	2330	1672-1696	Street Address at Diagnosis, p. 48	Patient address (number and street) at diagnosis, p. 55
Addr at DX--Postal Code	100	47-55	ZIP / Postal Code at Diagnosis, p. 51	Postal code at diagnosis, p. 59
Addr at DX--State	80	42-43	State at Diagnosis, p. 49	State at diagnosis, p. 57
Age at Diagnosis	230	79-81	Age at Diagnosis, p. 44	Age at diagnosis, p. 72
Behavior (92-00) ICD-O-2	430	236	ICD-O-2 Behavior Code, p. 84	Behavior code, p. 110
Behavior Code ICD-O-3	523	257	ICD-O-3 Behavior Code, p. 85	not in ROADS
Birth Date	240	82-89	Birth Date, p. 43	Date of birth, p. 71
Birthplace	250	90-92	Birthplace, p. 45	Place of birth, p. 70
Class of Case	610	324	Class of Case, p. 96	Class of case, p. 91
Date Case Completed	2090	952-959	Date Case Completed, p. 183	not in ROADS
Date Case Report Exported	2110	968-975	Date Case Report Exported, p. 183	not in ROADS
Date Case Report Received	2111	996-1003	Date Case Report Received, p. 183	not in ROADS
Date of 1st Contact	580	300-307	Date of First Contact, p. 39	not in ROADS
Date of 1st Crs RX--COC	1270	593-600	Date of First Course Treatment -- COC, p. 152	Date of first course treatment, p. 179
Date of Diagnosis	390	219-226	Date of Diagnosis, p. 94	Date of initial diagnosis, p. 101
Date of Last Contact	1750	791-798	Date of Last Contact, p. 181	Date of last contact or death, p. 263
Diagnostic Confirmation	490	242	Diagnostic Confirmation, p. 106	Diagnostic confirmation, p. 114
EOD--Extension	790	393-394	EOD -- Extension, p. 144	Extension (SEER EOD), p. 127
EOD--Extension Prost Path	800	395-396	EOD -- Extension Prostate Pathology, p. 144	not in ROADS
EOD--Lymph Node Involv	810	397	EOD -- Lymph Node Involvement, p. 145	Lymph nodes (SEER EOD), p. 128
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* except State/Requestor Items is listed as if under MCR field name Managing Physician Name

V9.1 Field Name	Item #	Position	Field in the MCR Manual	Field in the ROADS Manual
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Name--First	2240	1551-1564	Patient First Name, p. 41	First name, p. 49
Name--Last	2230	1526-1550	Patient Last Name, p. 40	Last name, p. 48
Name--Maiden	2390	1770-1784	Patient Maiden Name, p. 41	Maiden name, p. 51
Name--Middle	2250	1565-1578	Patient Middle Name, p. 41	Middle name, p. 50
Name--Suffix	2270	1582-1584	Patient Name Suffix, p. 40	Name suffix, p. 47
Pediatric Stage	1120	479-480	Pediatric Stage, p. 139	Pediatric stage, p. 174
Pediatric Staging System	1130	481-482	Pediatric Staging System, p. 141	Type of staging system (pediatric), p. 173
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RX Date--Other	1250	577-584	Other Cancer-Directed Therapy -- Date Started, p. 180	Date other treatment started, p. 245
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RX Date--Surgery	1200	537-544	Cancer-Directed Surgery -- Date Started, p. 159	Date of surgery, p. 184
RX Hosp--BRM	720	354	Immunotherapy -- At This Facility, p. 177	Immunotherapy at this facility, p. 244
RX Hosp--Chemo	700	352	Chemotherapy -- At This Facility, p. 172	Chemotherapy at this facility, p. 231
RX Hosp--DX/Stg/Pall Proc	740	356-357	Diagnostic/Staging/Palliative Procedures -- At This Facility, p. 155	Diagnostic, staging, or palliative procedures at this facility, p. 183
RX Hosp--Hormone	710	353	Hormone Therapy -- At This Facility, p. 175	Hormone therapy at this facility, p. 240
RX Hosp--Other	730	355	Other Cancer-Directed Therapy -- At This Facility, p. 180	Other treatment at this facility, p. 248
RX Hosp--Radiation	690	351	Radiation Therapy -- At This Facility, p. 167	Radiation at this facility, p. 200
RX Hosp--Reg LN Removed	676	345-346	Number of Regional Lymph Nodes Removed -- At This Facility, p. 161	see Surgery at this facility, p. 190; Number of regional lymph nodes removed, p. 193

V9.1 Field Name	Item #	Position	Field in the MCR Manual	Field in the ROADS Manual
RX Hosp-- Scope Reg LN Sur	672	343	Scope of Regional Lymph Node Surgery -- At This Facility, p. 161	see Surgery at this facility, p. 190; Scope of regional lymph node surgery, p. 192
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RX Hosp-- Surg Prim Site	670	341-342	Surgery of Primary Site -- At This Facility, p. 159	see Surgery at this facility, p. 190; Surgery of primary site, p. 187
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RX Summ--Chemo	1390	628	Chemotherapy -- Summary, p. 172	Chemotherapy, p. 228
RX Summ--DX/Stg/Pall Proc	1350	623-624	Diagnostic/Staging/Palliative Procedures -- Summary, p. 154	Diagnostic, staging, or palliative procedures, p. 181
RX Summ--Hormone	1400	629	Hormone Therapy -- Summary, p. 175	Hormone therapy, p. 238
RX Summ--Other	1420	631	Other Cancer-Directed Therapy -- Summary, p. 180	Other treatment, p. 246
RX Summ--Radiation	1360	625	Radiation Therapy -- Summary, p. 167	Radiation, p. 199
RX Summ--Reconstruct 1st	1330	621	Reconstruction -- First Course, p. 164	Reconstruction/restoration-first course, p. 195
RX Summ--Reg LN Examined	1296	613-614	Number of Regional Lymph Nodes Removed -- Summary, p. 162	Number of regional lymph nodes removed, p. 193
RX Summ--Scope Reg LN Sur	1292	611	Scope of Regional Lymph Node Surgery -- Summary, p. 161	Scope of regional lymph node surgery, p. 192
RX Summ--Surg Oth Reg/Dis	1294	612	Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes -- Summary, p. 163	Surgery of other regional site(s), distant site(s) or distant lymph node(s), p. 194
RX Summ--Surg Prim Site	1290	609-610	Surgery of Primary Site -- Summary, p. 158	Surgery of primary site, p. 187
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RX Text--BRM	2660	4597-4696	Immunotherapy -- Narrative, p. 177	not in ROADS
RX Text--Chemo	2640	4197-4396	Chemotherapy -- Narrative, p. 172	not in ROADS
RX Text--Hormone	2650	4397-4596	Hormone Therapy -- Narrative, p. 175	not in ROADS
RX Text--Other	2670	4697-4796	Other Cancer-Directed Therapy -- Narrative, p. 180	not in ROADS
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Text--DX Proc--Op	2560	2867-3116	Text--Dx Proc--Op, p. 146	not in ROADS
Text--DX Proc--Path	2570	3117-3366	Text--Dx Proc--Path, p. 147	not in ROADS
Text--DX Proc--PE	2520	1917-2116	Text--Dx Proc--PE, p. 145	not in ROADS

V9.1 Field Name	Item #	Position	Field in the MCR Manual	Field in the ROADS Manual
Text--DX Proc--Scopes	2540	2367-2616	Text--Dx Proc--Scopes, p. 146	not in ROADS
Text--DX Proc--X-Ray/Scan	2530	2117-2366	Text--Dx Proc--X-Ray/Scan, p. 146	not in ROADS
Text--Histology Title	2590	3407-3446	Narrative Histology/Behavior/Grade, p. 94	not in ROADS
Text--Primary Site Title	2580	3367-3406	Narrative Primary Site, p. 78	not in ROADS
Text--Remarks	2680	4797-5146	Comments / Narrative Remarks, p. 182	not in ROADS
Text--Staging	2600	3447-3746	Text--Staging, p. 147	not in ROADS
Text--Usual Industry	320	143-182	Usual Industry / Type of Business, p. 69	Usual industry, p. 84
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TNM Clin N	950	434-435	Clinical N, p. 114	Clinical N, p. 144
TNM Clin Stage Group	970	438-439	Clinical Stage Grouping, p. 119	Clinical stage group, p. 148
TNM Clin T	940	432-433	Clinical T, p. 111	Clinical T, p. 142
TNM Edition Number	1060	452	TNM Edition Number, p. 130	TNM edition number, p. 176
TNM Path M	900	426-427	Pathologic M, p. 126	Pathologic M, p. 156
TNM Path N	890	424-425	Pathologic N, p. 124	Pathologic N, p. 154
TNM Path Stage Group	910	428-429	Pathologic Stage Grouping, p. 128	Pathologic stage group, p. 158
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Type of Reporting Source	500	243	Type of Reporting Source, p. 108	Type of reporting source, p. 88
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NAACCR V9.1 Field Names and Associated MCR Automated Edits

field: **Abstracted By**
edit: 1. Abstracted By (NAACCR) p. E-35

field: **Accession Number--Hosp** (called Accession Number in MCR Manual)
edits: none

field: **Addr at DX--City** (called City / Town at Diagnosis in MCR Manual)
edits: 2. Addr at DX--City (NAACCR) p. E-35
45. Invalid City/Town Name (MCR-CIMS) p. E-54

field: **Addr at DX--No & Street** (called Street Address at Diagnosis in MCR Manual)
edit: 5. Address at dx--No & Street (MCR-CIMS) p. E-36

field: **Addr at DX--Postal Code** (called ZIP / Postal Code at Diagnosis in MCR Manual)
edits: 3A. Addr at DX--Postal Code (NAACCR) p. E-35
3B. Addr at DX--Postal Code (NAACCR/MCR-CIMS) p. E-35
46. Invalid Zipcode (MCR-CIMS) p. E-54

field: **Addr at DX--State** (called State at Diagnosis in MCR Manual)
edits: 4. Addr at DX--State (NAACCR) p. E-35
54. MCR-CIMS Master Db Edits p. E-58

field: **Age at Diagnosis**
edits: 6. Age at Diagnosis (SEER AGEDX) p. E-36
7. Age at Diagnosis, Text--Usual Industry (NAACCR/MCR) p. E-36
8. Age at Diagnosis, Text--Usual Occupation (NAACCR/MCR) p. E-37
9. Age, Birth Date, Date of Diagnosis (NAACCR IF13) p. E-37
10A. Age, Primary Site, Morphology (NAACCR IF15) p. E-38
10B. Age, Primary Site, Morphology ICDO3 (NAACCR IF15) p. E-38
53. Marital Status at DX, Age at Diagnosis (SEER IF14) p. E-58

field: **Behavior (92-00) ICD-O-2** (called ICD-O-2 Behavior Code in MCR Manual)
edits: 11A. Behavior (COC) p. E-39
10A. Age, Primary Site, Morphology (NAACCR IF15) p. E-37
12A. Behavior Code, Histologic Type (NAACCR/MCR-CIMS) p. E-40
13A. Behavior ICDO2, Date of Diagnosis (NAACCR) p. E-40
14A. Behavior, Summary Stage (NAACCR) p. E-41
32A. Diagnostic Confirmation, Behavior Code (SEER IF31) p. E-47
34A. EOD--Reg Nodes Ex,Reg Nodes Pos, Prim Site (NAACCR) p. E-49
36A. EOD--Tumor Size, Primary Site (NAACCR) p. E-50
49B. Laterality, Primary Site, Morphology (NAACCR IF42) p. E-57
55. MCR-CIMS (NOT REPORTABLE CASE) p. E-59
56A. Morphology--Type&Behavior (SEER MORPH) p. E-59
70A. Primary Site, Behavior Code (MCR-CIMS/SEER IF39) p. E-65
183. Verify ICDO2 to ICDO3 Conversion (NAACCR) p. E-109

field: **Behavior Code ICD-O-3** (called ICD-O-3 Behavior Code in MCR Manual)

edits:
- 11B. Behavior ICDO3 (COC) p. E-40
- 10B. Age, Primary Site, Morphology ICDO3 (NAACCR IF15) p. E-38
- 13B. Behavior ICDO3, Date of Diagnosis (NAACCR) p. E-40
- 12B. Behavior ICDO3, Histologic Type ICDO3 (NAACCR/MCR) p. E-41
- 14B. Behavior, Summary Stage 2000 (NAACCR) p. E-42
- 32B. Diagnostic Confirmation, Behavior ICD03 (SEER IF31) p. E-48
- 34B. EOD--Reg Nodes Ex,ReNodes Pos, Site, ICDO3 (NAACCR p. E-49
- 36B. EOD--Tumor Size, Primary Site, ICDO3 (NAACCR) p. E-51
- 49A. Laterality, Primary Site, Morph ICDO3 (NAACCR IF42) p. E-56
- 55. MCR-CIMS (NOT REPORTABLE CASE) p. E-59
- 56B. Morphology--Type&Behavior ICDO3 (SEER MORPH) p. E-61
- 70B. Primary Site, Behavior Code ICDO3 (SEER IF39/MCR- p. E-65
- 183. Verify ICDO2 to ICDO3 Conversion (NAACCR) p. E-109

field: **Birth Date**

edits:
- 15. Birth Date (NAACCR DATEEDIT) p. E-42
- 7. Age at Diagnosis, Text--Usual Industry (NAACCR/MCR p. E-36
- 8. Age at Diagnosis, Text--Usual Occupation (NAACCR/MCR p. E-37
- 9. Age, Birth Date, Date of Diagnosis (NAACCR IF13) p. E-37
- 16. Birth Date, Date of Diagnosis (NAACCR IF47) p. E-43

field: **Birthplace**

edit:
- 17. Birthplace (SEER POB) p. E-43

field: **Class of Case**

edits:
- 18. Class of Case (COC) p. E-43
- 7. Age at Diagnosis, Text--Usual Industry (NAACCR/MCR p. E-36
- 8. Age at Diagnosis, Text--Usual Occupation (NAACCR/MCR p. E-37
- 19. Class of Case, Type of Reporting Source (NAACCR) p. E-43
- 20. Class, Date Diag, Date Last Cont, Vit Stat (COC) p. E-44
- 38. Hemato, Summ Stage, Class of Case (NAACCR) p. E-51
- 40A. Hematopoietic, TNM (NAACCR) p. E-52
- 40B. Hematopoietic, TNM, ICDO3 (NAACCR) p. E-52
- 55. MCR-CIMS (NOT REPORTABLE CASE) p. E-59
- 71. Primary Site, Histology Narratives check (MCR-CIMS) p. E-66
- 97. RX Date--Surgery, RX Text--Surgery (NAA/MCR-CIMS) p. E-78
- 123. RX Summ--BRM, RX Text--BRM (NAACCR/MCR-CIMS) p. E-84
- 126. RX Summ--Chemo, RX Text--Chemo (NAACR/MCR-CIMS) p. E-85
- 131. RX Summ--Hormone, RX Text--Hormone (NAAC/MCR-CIMS) p. E-86
- 134. RX Summ--Other, RX Text--Other (NAA/MCR-CIMS) p. E-87
- 157. Summary Stage 2000, Site, Hist, Class (NAACCR) p. E-93

field: **Date Case Completed**

edit:
- 21. Date Case Completed (MCR-CIMS) p. E-44

field: **Date Case Report Exported**

edit:
- 22. Date Case Exported (MCR-CIMS) p. E-44

field: **Date Case Report Received**

edits: none

field: **Date of 1st Contact** (called Date of First Contact in MCR Manual)

edit:
- 27. Date of Adm/1st Contact (NAACCR DATEEDIT) p. E-46

field: **Date of 1st Crs RX--COC** (called Date of First Course Treatment -- COC in MCR Manual)

edits:
- 23. Date of 1st Crs RX--COC (COC) p. E-44
- 24. Date of 1st Crs RX--COC, Date Last Contact (COC) p. E-45
- 25. Date of 1st Crs RX--COC, Date of DX (COC) p. E-45
- 26. Date of 1st Crs RX--COC, Dates of RX (NAACCR) p. E-46

field: **Date of Diagnosis**

edits:
- 28. Date of Diagnosis (NAACCR DATEEDIT) p. E-46
- 7. Age at Diagnosis, Text--Usual Industry (NAACCR/MCR p. E-36
- 8. Age at Diagnosis, Text--Usual Occupation (NAACCR/MCR p. E-37
- 9. Age, Birth Date, Date of Diagnosis (NAACCR IF13) p. E-37
- 12A. Behavior Code, Histologic Type (NAACCR/MCR-CIMS) p. E-40
- 13A. Behavior ICDO2, Date of Diagnosis (NAACCR) p. E-40
- 13B. Behavior ICDO3, Date of Diagnosis (NAACCR) p. E-40
- 12B. Behavior ICDO3, Histologic Type ICDO3 (NAACCR/MCR) p. E-42
- 16. Birth Date, Date of Diagnosis (NAACCR IF47) p. E-43
- 20. Class, Date Diag, Date Last Cont, Vit Stat (COC) p. E-44
- 25. Date of 1st Crs RX--COC, Date of DX (COC) p. E-45
- 30. Date of Last Contact, Date of Diag. (NAACCR IF19) p. E-47
- 34A. EOD--Reg Nodes Ex,Reg Nodes Pos, Prim Site (NAACCR) p. E-49
- 34B. EOD--Reg Nodes Ex,ReNodes Pos, Site, ICDO3 (NAACCR p. E-49
- 36A. EOD--Tumor Size, Primary Site (NAACCR) p. E-50
- 36B. EOD--Tumor Size, Primary Site, ICDO3 (NAACCR) p. E-51
- 40A. Hematopoietic, TNM (NAACCR) p. E-52
- 40B. Hematopoietic, TNM, ICDO3 (NAACCR) p. E-52
- 42A. Histology ICDO2, Date of Diagnosis (NAACCR) p. E-53
- 42B. Histology ICDO3, Date of Diagnosis (NAACCR) p. E-53
- 49A. Laterality, Primary Site, Morph ICDO3 (NAACCR IF42) p. E-56
- 49B. Laterality, Primary Site, Morphology (NAACCR IF42) p. E-57
- 54. MCR-CIMS Master Db Edits p. E-58
- 55. MCR-CIMS (NOT REPORTABLE CASE) p. E-59
- 56B. Morphology--Type&Behavior ICDO3 (SEER MORPH) p. E-61
- 71. Primary Site, Histology Narratives check (MCR-CIMS) p. E-66
- 74A. Primary Site, No AJCC Scheme-Ed 5, ICDO3 (NAACCR) p. E-71
- 74B. Primary Site, No AJCC Staging Scheme-Ed 5 (NAACCR) p. E-72
- 78. Race 2, Date of DX (NAACCR) p. E-73
- 80. Race 3, Date of DX (NAACCR) p. E-73
- 82. Race 4, Date of DX (NAACCR) p. E-74
- 84. Race 5, Date of DX (NAACCR) p. E-74
- 142. RX Summ--Scope Reg LN Sur,RX Summ--Reg LN Ex (NPCR p. E-89
- 155A. Summary Stage 2000, Date of Diagnosis (NAACCR) p. E-92
- 155B. Summary Stage, Date of Diagnosis (NAACCR) p. E-96
- 161. Summary Stage, Histology (COC) p. E-96
- 177. Type of Report Srce(DC/AO), Date of Dx (SEER IF02) p. E-107
- 183. Verify ICDO2 to ICDO3 Conversion (NAACCR) p. E-109
- 186. Year First Seen This CA, Date of DX (NAACCR) p. E-110

field: **Date of Last Contact**

edits:
- 29. Date of Last Contact (NAACCR DATEEDIT) p. E-46
- 20. Class, Date Diag, Date Last Cont, Vit Stat (COC) p. E-44
- 24. Date of 1st Crs RX--COC, Date Last Contact (COC) p. E-45
- 30. Date of Last Contact, Date of Diag. (NAACCR IF19) p. E-47
- 177. Type of Report Srce(DC/AO), Date of Dx (SEER IF02) p. E-107

field: **Diagnostic Confirmation**
edits: 31. Diagnostic Confirmation (SEER DXCONF) p. E-47
32A. Diagnostic Confirmation, Behavior Code (SEER IF31) p. E-47
32B. Diagnostic Confirmation, Behavior ICD03 (SEER IF31) p. E-48
33A. Diagnostic Confirmation, Histologic Typ(SEER IF48) p. E-48
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146. RX Summ--Surg Prim Site, Diag Conf (SEER IF76) p. E-90
178. Type of Report Srce(DC/AO), Diag Conf (SEER IF05) p. E-108

field: **EOD--Extension**
edits: none

field: **EOD--Extension Prost Path** (called EOD -- Extension Prostate Pathology in MCR Manual)
edits: none

field: **EOD--Lymph Node Involv** (called EOD -- Lymph Node Involvement in MCR Manual)
edits: none

field: **EOD--Tumor Size**
edit: 35. EOD--Tumor Size (NAACCR) p. E-50
36A. EOD--Tumor Size, Primary Site (NAACCR) p. E-50
36B. EOD--Tumor Size, Primary Site, ICDO3 (NAACCR) p. E-51

field: **Grade** (called Grade / Differentiation / Immunophenotype in MCR Manual)
edits: 37. Grade (COC) p. E-51
56A. Morphology--Type&Behavior (SEER MORPH) p. E-59
56B. Morphology--Type&Behavior ICDO3 (SEER MORPH) p. E-61

field: **Histologic Type ICD-O-3** (called ICD-O-3 Histologic Type Code in MCR Manual)
edits: 41B. Histologic Type ICDO3 (COC) p. E-53
56B. Morphology--Type&Behavior ICDO3 (SEER MORPH) p. E-61
10B. Age, Primary Site, Morphology ICDO3 (NAACCR IF15) p. E-38
12B. Behavior ICDO3, Histologic Type ICDO3 (NAACCR/MCR) p. E-41
33B. Diagnostic Confirmation, Histology ICD03(SEER IF48 p. E-48
34B. EOD--Reg Nodes Ex,ReNodes Pos, Site, ICDO3 (NAACCR p. E-49
36B. EOD--Tumor Size, Primary Site, ICDO3 (NAACCR) p. E-51
40B. Hematopoietic, TNM, ICDO3 (NAACCR) p. E-52
43. Histology ICDO2, Histology ICDO3 (NAACCR) p. E-53
42B. Histology ICDO3, Date of Diagnosis (NAACCR) p. E-53
49A. Laterality, Primary Site, Morph ICDO3 (NAACCR IF42) p. E-56
50. Lymphoma, Primary Site, Summary Stage (NAACCR) p. E-57
51B. Lymphoma, TNM, ICDO3 (NAACCR) p. E-58
55. MCR-CIMS (NOT REPORTABLE CASE) p. E-59
70B. Primary Site, Behavior Code ICDO3 (SEER IF39/MCR- p. E-65
72A. Primary Site, Morphology-Imposs ICDO3 (SEER IF38) p. E-67
73B. Primary Site, Morphology-Type ICDO3 (SEER IF25) p. E-70
74A. Primary Site, No AJCC Scheme-Ed 5, ICDO3 (NAACCR) p. E-71
141B. RX Summ--Scope Reg LN Sur, Primary Site, ICDO3(COC) p. E-89
157. Summary Stage 2000, Site, Hist, Class (NAACCR) p. E-93
158. Summary Stage 2000, Site, Hist, Rpt Srce (NAACCR) p. E-94
164B. Surgery, RX Date--Surgery, ICDO3 (COC) p. E-102
183. Verify ICDO2 to ICDO3 Conversion (NAACCR) p. E-109

field: **Histology (92-00) ICD-O-2** (called ICD-O-2 Histologic Type Code in MCR Manual)
edits: 41A. Histologic Type (COC) p. E-53
56A. Morphology--Type&Behavior (SEER MORPH) p. E-59
10A. Age, Primary Site, Morphology (NAACCR IF15) p. E-37
12A. Behavior Code, Histologic Type (NAACCR/MCR-CIMS) p. E-40
33A. Diagnostic Confirmation, Histologic Typ(SEER IF48) p. E-48
34A. EOD--Reg Nodes Ex,Reg Nodes Pos, Prim Site (NAACCR) p. E-49
36A. EOD--Tumor Size, Primary Site (NAACCR) p. E-50
38. Hemato, Summ Stage, Class of Case (NAACCR) p. E-51
39. Hemato, Summ Stage, Type of Report Srce (NAACCR) p. E-52
40A. Hematopoietic, TNM (NAACCR) p. E-52
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field: **ICD-O-3 Conversion Flag**
edits: 44. ICD-O-3 Conversion Flag (NAACCR)
183. Verify ICDO2 to ICDO3 Conversion (NAACCR) p. E-109

field: **Institution Referred From**
edits: none

field: **Institution Referred To**
edits: none

field: **Laterality**
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89. RML Lung, Laterality (NAACCR) p. E-76
181. Unknown Site, Laterality (NAACCR) p. E-108

field: State/Requestor Items (**Managing Physician Name**)
edits: none

field: **Marital Status at DX** (called Marital Status at Diagnosis in MCR Manual)
edits: 52. Marital Status at DX (SEER MARITAL) p. E-58
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field: **Medical Record Number**
edits: none

field: **Name--Alias** (called Patient Alias Name in MCR Manual)
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field: **Name--First** (called First Name in MCR Manual)
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field: **Name--Maiden** (called Maiden Name in MCR Manual)
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field: **Name--Middle** (called Middle Name in MCR Manual)
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edit: 77. Race 2 (NAACCR) p. E-73
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field: **Regional Nodes Examined**
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86. Regional Nodes Ex, Reg Nodes Pos (COC) p. E-75

field: **Regional Nodes Positive**
edits: 88. Regional Nodes Positive (COC) p. E-76
34A. EOD--Reg Nodes Ex,Reg Nodes Pos, Prim Site (NAACCR) p. E-49
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156A. Summary Stage 2000, Regional Nodes Pos (NAACCR) p. E-93
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field: **Reporting Hospital** (called Facility Code in MCR Manual)
edits: none (but must be the same for each case record in a data submission)

field: **RX Date--BRM** (called Immunotherapy -- Date Started in MCR Manual)
edits: 90. RX Date--BRM (NAACCR) p. E-76
26. Date of 1st Crs RX--COC, Dates of RX (NAACCR) p. E-46
122. RX Summ--BRM, RX Date--BRM (COC) p. E-84

field: **RX Date--Chemo** (called Chemotherapy -- Date Started in MCR Manual)
edits: 91. RX Date--Chemo (NAACCR) p. E-77
26. Date of 1st Crs RX--COC, Dates of RX (NAACCR) p. E-46
125. RX Summ--Chemo, RX Date--Chemo (COC) p. E-85

field: **RX Date--DX/Stg/Pall Proc** (called Diagnostic/Staging/Palliative Procedures--Date Started in MCR Manual)
edits: 92. RX Date--DX/Stg/Pall Proc (NAACCR) p. E-77
128. RX Summ--DX/Stg/Pall, RX Date--DX/Stg/Pall Proc (NAACCR p. E-86

field: **RX Date--Hormone** (called Hormone Therapy -- Date Started in MCR Manual)
edits: 93. RX Date--Hormone (NAACCR) p. E-77
26. Date of 1st Crs RX--COC, Dates of RX (NAACCR) p. E-46
130. RX Summ--Hormone, RX Date--Hormone (COC) p. E-86

field: **RX Date--Other** (called Other Cancer-Directed Therapy--Date Started in MCR Manual)
edits: 94. RX Date--Other (NAACCR) p. E-77
26. Date of 1st Crs RX--COC, Dates of RX (NAACCR) p. E-46
133. RX Summ--Other, RX Date--Other (COC) p. E-87

field: **RX Date--Radiation** (called Radiation Therapy -- Date Started in MCR Manual)
edits: 95. RX Date--Radiation (NAACCR) p. E-77
26. Date of 1st Crs RX--COC, Dates of RX (NAACCR) p. E-46
136. RX Summ--Radiation, RX Date--Radiation (COC) p. E-88

field: **RX Date--Surgery** (called Cancer-Directed Surgery -- Date Started in MCR Manual)
edits: 96. RX Date--Surgery (NAACCR) p. E-77
26. Date of 1st Crs RX--COC, Dates of RX (NAACCR) p. E-46
97. RX Date--Surgery, RX Text--Surgery (NAA/MCR-CIMS) p. E-78
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164B. Surgery, RX Date--Surgery, ICDO3 (COC) p. E-102

field: **RX Hosp--BRM** (called Immunotherapy -- At This Facility in MCR Manual)
edits: 97. RX Hosp--BRM (NAACCR) p. E-78
98. RX Hosp--BRM, RX Summ--BRM (COC) p. E-78

field: **RX Hosp--Chemo** (called Chemotherapy -- At This Facility in MCR Manual)
edits: 100. RX Hosp--Chemo (NAACCR) p. E-78
101. RX Hosp--Chemo, RX Summ--Chemo (COC) p. E-79

field: **RX Hosp--DX/Stg/Pall Proc** (called Diagnostic/Staging/Palliative Procedures--At This Facility in MCR Manual)
edits: 102. RX Hosp--DX/Stg/Pall Proc (NAACCR) p. E-79
103. RX Hosp--DX/Stg/Pall, RX Summ--DX/Stg/Pall (NAACCR) p. E-79

field: **RX Hosp--Hormone** (called Hormone Therapy -- At This Facility in MCR Manual)
edits: 104. RX Hosp--Hormone (NAACCR) p. E-79
105. RX Hosp--Hormone, RX Summ--Hormone (COC) p. E-80

field: **RX Hosp--Other** (called Other Cancer-Directed Therapy--At This Facility in MCR Manual)
edits: 106. RX Hosp--Other (NAACCR) p. E-80
107. RX Hosp--Other, RX Summ--Other (COC) p. E-80

field: **RX Hosp--Radiation** (called Radiation Therapy -- At This Facility in MCR Manual)
edits: 108. RX Hosp--Radiation (NAACCR) p. E-80
109. RX Hosp--Radiation, RX Summ--Radiation (COC) p. E-81

field: **RX Hosp--Reg LN Removed** (called Number of Regional Lymph Nodes Removed--At This Facility in MCR Manual)
edits: 110. RX Hosp--Reg LN Examined (NAACCR) p. E-81
114. RX Hosp--Scope Reg LN Sur,RX Hosp--Reg LN Ex (COC p. E-82

field: **RX Hosp--Scope Reg LN Sur** (called Scope of Regional Lymph Node Surgery--At This Facility in MCR Manual)
edits: 112. RX Hosp--Scope Reg LN Sur (NAACCR) p. E-81
111. RX Hosp--Scope LN Sur, RX Summ--Scope LN Sur(COC) p. E-81
113. RX Hosp--Scope Reg LN Sur, Primary Site (COC) p. E-82
114. RX Hosp--Scope Reg LN Sur,RX Hosp--Reg LN Ex (COC p. E-82

field: **RX Hosp--Surg Oth Reg/Dis** (called Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes--At This Facility in MCR Manual)
edits: 116. RX Hosp--Surg Oth Reg/Dis (NAACCR) p. E-83
115. RX Hosp--Surg Oth Reg, RX Summ--Surg Oth Reg (COC) p. E-82
117. RX Hosp--Surg Oth Reg/Dis, Primary Site(COC) p. E-83

field: **RX Hosp--Surg Prim Site** (called Surgery of Primary Site -- At This Facility in MCR Manual)
edits: 119. RX Hosp--Surg Prim Site (NAACCR) p. E-83
118. RX Hosp--Surg Pri Sit, RX Summ--Surg Pri Sit (COC) p. E-83
120. RX Hosp--Surg Prim Site, Primary Site (COC) p. E-84

field: **RX Summ--BRM** (called Immunotherapy -- Summary in MCR Manual)
edits: 121. RX Summ--BRM (COC) p. E-84
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122. RX Summ--BRM, RX Date--BRM (COC) p. E-84
123. RX Summ--BRM, RX Text--BRM (NAACCR/MCR-CIMS) p. E-84

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edits: 124. RX Summ--Chemo (COC) p. E-85
101. RX Hosp--Chemo, RX Summ--Chemo (COC) p. E-79
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126. RX Summ--Chemo, RX Text--Chemo (NAACR/MCR-CIMS) p. E-85

field: **RX Summ--DX/Stg/Pall Proc** (called Diagnostic/Staging/Palliative Procedures--Summary in MCR Manual)

edits: 127. RX Summ--DX/Stg/Pall Proc (COC) p. E-85
103. RX Hosp--DX/Stg/Pall, RX Summ--DX/Stg/Pall (NAACCR) p. E-79
128. RX Summ--DX/Stg/Pall, RX Date--DX/Stg/Pall Proc (NAACCR p. E-86

field: **RX Summ--Hormone** (called Hormone Therapy -- Summary in MCR Manual)

edits: 129. RX Summ--Hormone (COC) p. E-86
105. RX Hosp--Hormone, RX Summ--Hormone (COC) p. E-80
130. RX Summ--Hormone, RX Date--Hormone (COC) p. E-86
131. RX Summ--Hormone, RX Text--Hormone (NAAC/MCR-CIMS) p. E-86

field: **RX Summ--Other** (called Other Cancer-Directed Therapy -- Summary in MCR Manual)

edits: 132. RX Summ--Other (COC) p. E-87
107. RX Hosp--Other, RX Summ--Other (COC) p. E-80
133. RX Summ--Other, RX Date--Other (COC) p. E-87
134. RX Summ--Other, RX Text--Other (NAA/MCR-CIMS) p. E-87

field: **RX Summ--Radiation** (called Radiation Therapy -- Summary in MCR Manual)

edits: 135. RX Summ--Radiation (COC) p. E-87
109. RX Hosp--Radiation, RX Summ--Radiation (COC) p. E-81
136. RX Summ--Radiation, RX Date--Radiation (COC) p. E-88
162. Surgery, Rad, Surg/Rad Seq (COC) p. E-100

field: **RX Summ--Reconstruct 1st** (called Reconstruction -- First Course in MCR Manual)

edits: 137. RX Summ--Reconstruct 1st (NAACCR) p. E-88
138. RX Summ--Reconstruct 1st, Primary Site (COC) p. E-88

field: **RX Summ--Reg LN Examined** (called Number of Regional Lymph Nodes Removed--Summary in MCR Manual)

edits: 139. RX Summ--Reg LN Examined (COC) p. E-88
142. RX Summ--Scope Reg LN Sur,RX Summ--Reg LN Ex (NPCR p. E-89

field: **RX Summ--Scope Reg LN Sur** (called Scope of Regional Lymph Node Surgery--Summary in MCR Manual)

edits: 140. RX Summ--Scope Reg LN Sur (COC) p. E-88
111. RX Hosp--Scope LN Sur, RX Summ--Scope LN Sur(COC) p. E-81
141A. RX Summ--Scope Reg LN Sur, Primary Site (COC) p. E-89
141B. RX Summ--Scope Reg LN Sur, Primary Site, ICDO3(COC) p. E-89
142. RX Summ--Scope Reg LN Sur,RX Summ--Reg LN Ex (NPCR p. E-89
162. Surgery, Rad, Surg/Rad Seq (COC) p. E-100
163. Surgery, Reason No Surg (COC) p. E-101
164A. Surgery, RX Date--Surgery (COC) p. E-101
164B. Surgery, RX Date--Surgery, ICDO3 (COC) p. E-102

field: **RX Summ--Surg Oth Reg/Dis** (called Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes--Summary in MCR Manual)

edits: 143. RX Summ--Surg Oth Reg/Dis (COC) p. E-89
115. RX Hosp--Surg Oth Reg, RX Summ--Surg Oth Reg (COC) p. E-82
144. RX Summ--Surg Oth Reg/Dis, Primary Site (COC) p. E-90
162. Surgery, Rad, Surg/Rad Seq (COC) p. E-100
163. Surgery, Reason No Surg (COC) p. E-101
164A. Surgery, RX Date--Surgery (COC) p. E-101
164B. Surgery, RX Date--Surgery, ICDO3 (COC) p. E-102

field: **RX Summ--Surg Prim Site** (called Surgery of Primary Site--Summary in MCR Manual)
edits: 145. RX Summ--Surg Prim Site (COC) p. E-90
118. RX Hosp--Surg Pri Sit, RX Summ--Surg Pri Sit (COC) p. E-83
146. RX Summ--Surg Prim Site, Diag Conf (SEER IF76) p. E-90
147. RX Summ--Surg Prim Site, Primary Site (COC) p. E-90
162. Surgery, Rad, Surg/Rad Seq (COC) p. E-100
163. Surgery, Reason No Surg (COC) p. E-101
164A. Surgery, RX Date--Surgery (COC) p. E-101
164B. Surgery, RX Date--Surgery, ICDO3 (COC) p. E-102

field: **RX Summ--Surg/Rad Seq** (called Radiation / Surgery Sequence in MCR Manual)
edits: 148. RX Summ--Surg/Rad Seq (SEER RADSEQ) p. E-90
162. Surgery, Rad, Surg/Rad Seq (COC) p. E-100

field: **RX Text--BRM** (called Immunotherapy -- Narrative in MCR Manual)
edit: 123. RX Summ--BRM, RX Text--BRM (NAACCR/MCR-CIMS) p. E-84

field: **RX Text--Chemo** (called Chemotherapy -- Narrative in MCR Manual)
edit: 126. RX Summ--Chemo, RX Text--Chemo (NAACR/MCR-CIMS) p. E-85

field: **RX Text--Hormone** (called Hormone Therapy -- Narrative in MCR Manual)
edit: 131. RX Summ--Hormone, RX Text--Hormone (NAAC/MCR-CIMS) p. E-86

field: **RX Text--Other** (called Other Cancer-Directed Therapy -- Narrative in MCR Manual)
edit: 134. RX Summ--Other, RX Text--Other (NAA/MCR-CIMS) p. E-87

field: **RX Text--Radiation (Beam)** (called Radiation Therapy -- Narrative in MCR Manual)
edits: none

field: **RX Text--Surgery** (called Surgery -- Narrative in MCR Manual)
edit: 97. RX Date--Surgery, RX Text--Surgery (NAA/MCR-CIMS) p. E-78

field: **SEER Summary Stage 1977**
edits: 154A. Summary Stage (NAACCR) p. E-92
14A. Behavior, Summary Stage (NAACCR) p. E-41
38. Hemato, Summ Stage, Class of Case (NAACCR) p. E-51
39. Hemato, Summ Stage, Type of Report Srce (NAACCR) p. E-52
50. Lymphoma, Primary Site, Summary Stage (NAACCR) p. E-57
155B. Summary Stage, Date of Diagnosis (NAACCR) p. E-96
161. Summary Stage, Histology (COC) p. E-96
156B. Summary Stage, Regional Nodes Pos (NAACCR) p. E-97
159B. Summary Stage, TNM M (NAACCR) p. E-98
160B. Summary Stage, TNM N (NAACCR) p. E-99
182. Unknown Site, Summary Stage (NAACCR) p. 109

field: **SEER Summary Stage 2000**
edits: 154B. Summary Stage 2000 (NAACCR) p. E-92
14B. Behavior, Summary Stage 2000 (NAACCR) p. E-42
155A. Summary Stage 2000, Date of Diagnosis (NAACCR) p. E-92
156A. Summary Stage 2000, Regional Nodes Pos (NAACCR) p. E-93
157. Summary Stage 2000, Site, Hist, Class (NAACCR) p. E-93
158. Summary Stage 2000, Site, Hist, Rpt Srce (NAACCR) p. E-94
159A. Summary Stage 2000, TNM M (NAACCR) p. E-95
160A. Summary Stage 2000, TNM N (NAACCR) p. E-96

field: **Sequence Number--Hospital**
edit: 149. Sequence Number--Hospital (COC) p. E-91

field: **Sex**
edits: 150. Sex (SEER SEX) p. E-91
151. Sex, Primary Site (SEER IF17) p. E-91

field: **Social Security Number**
edit: 152. Social Security Number (NAACCR) p. E-92

field: **Spanish/Hispanic Origin**
edit: 153. Spanish/Hispanic Origin (SEER SPANORIG) p. E-92

field: **Text--DX Proc--Lab Tests**
edits: none

field: **Text--DX Proc--Op**
edits: none

field: **Text--DX Proc--Path**
edits: none

field: **Text--DX Proc--PE**
edits: none

field: **Text--DX Proc--Scopes**
edits: none

field: **Text--DX Proc--X-Ray/Scan**
edits: none

field: **Text--Histology Title** (called Narrative Histology/Behavior/Grade in MCR Manual)
edit: 71. Primary Site, Histology Narratives check (MCR-CIMS) p. E-66

field: **Text--Primary Site Title** (called Narrative Primary Site in MCR Manual)
edit: 71. Primary Site, Histology Narratives check (MCR-CIMS) p. E-66

field: **Text--Remarks** (called Comments / Narrative Remarks in MCR Manual)
edits: none

field: **Text--Staging**
edits: none

field: **Text--Usual Industry** (called Usual Industry / Type of Business in MCR Manual)
edit: 7. Age at Diagnosis, Text--Usual Industry (NAACCR/MCR p. E-36

field: **Text--Usual Occupation** (called Usual Occupation in MCR Manual)
edit: 8. Age at Diagnosis, Text--Usual Occupation (NAACCR/MCR p. E-37

field: **TNM Clin M** (called Clinical M in MCR Manual)
edit: 165. TNM Clin M (COC) p. E-102
40A. Hematopoietic, TNM (NAACCR) p. E-52
40B. Hematopoietic, TNM, ICDO3 (NAACCR) p. E-52
51A. Lymphoma, TNM (NAACCR) p. E-57
51B. Lymphoma, TNM, ICDO3 (NAACCR) p. E-58
74A. Primary Site, No AJCC Scheme-Ed 5, ICDO3 (NAACCR) p. E-71
74B. Primary Site, No AJCC Staging Scheme-Ed 5 (NAACCR) p. E-72
159A. Summary Stage 2000, TNM M (NAACCR) p. E-95
159B. Summary Stage, TNM M (NAACCR) p. E-98
175. TNM-Emptiness Check (MCR-CIMS) p. E-107

field: **TNM Clin N** (called Clinical N in MCR Manual)
edit: 166. TNM Clin N (COC) p. E-103
40A. Hematopoietic, TNM (NAACCR) p. E-50
40B. Hematopoietic, TNM, ICDO3 (NAACCR) p. E-52
51A. Lymphoma, TNM (NAACCR) p. E-57
51B. Lymphoma, TNM, ICDO3 (NAACCR) p. E-58
74A. Primary Site, No AJCC Scheme-Ed 5, ICDO3 (NAACCR) p. E-71
74B. Primary Site, No AJCC Staging Scheme-Ed 5 (NAACCR) p. E-72
160A. Summary Stage 2000, TNM N (NAACCR) p. E-96
160B. Summary Stage, TNM N (NAACCR) p. E-99
175. TNM-Emptiness Check (MCR-CIMS) p. E-107

field: **TNM Clin Stage Group** (called Clinical Stage Grouping in MCR Manual)
edits: 167. TNM Clin Stage Group (COC) p. E-103
40A. Hematopoietic, TNM (NAACCR) p. E-52
40B. Hematopoietic, TNM, ICDO3 (NAACCR) p. E-52
74A. Primary Site, No AJCC Scheme-Ed 5, ICDO3 (NAACCR) p. E-71
74B. Primary Site, No AJCC Staging Scheme-Ed 5 (NAACCR) p. E-73
168. TNM Clin Stage Group, TNM Path Stage Group (COC) p. E-104
175. TNM-Emptiness Check (MCR-CIMS) p. E-107

field: **TNM Clin T** (called Clinical T in MCR Manual)
edit: 169. TNM Clin T (COC) p. E-104
40A. Hematopoietic, TNM (NAACCR) p. E-52
40B. Hematopoietic, TNM, ICDO3 (NAACCR) p. E-52
51A. Lymphoma, TNM (NAACCR) p. E-57
51B. Lymphoma, TNM, ICDO3 (NAACCR) p. E-58
74A. Primary Site, No AJCC Scheme-Ed 5, ICDO3 (NAACCR) p. E-71
74B. Primary Site, No AJCC Staging Scheme-Ed 5 (NAACCR) p. E-72
175. TNM-Emptiness Check (MCR-CIMS) p. E-107

field: **TNM Edition Number**
edit: 170. TNM Edition Number (COC) p. E-104

field: **TNM Path M** (called Pathologic M in MCR Manual)
edits: 171. TNM Path M (COC) p. E-105
40A. Hematopoietic, TNM (NAACCR) p. E-50
40B. Hematopoietic, TNM, ICDO3 (NAACCR) p. E-52
51A. Lymphoma, TNM (NAACCR) p. E-57
51B. Lymphoma, TNM, ICDO3 (NAACCR) p. E-58
74A. Primary Site, No AJCC Scheme-Ed 5, ICDO3 (NAACCR) p. E-71
74B. Primary Site, No AJCC Staging Scheme-Ed 5 (NAACCR) p. E-72
159A. Summary Stage 2000, TNM M (NAACCR) p. E-95
159B. Summary Stage, TNM M (NAACCR) p. E-98
175. TNM-Emptiness Check (MCR-CIMS) p. E-107

field: **TNM Path N** (called Pathologic N in MCR Manual)
edits: 172. TNM Path N (COC) p. E-105
40A. Hematopoietic, TNM (NAACCR) p. E-52
40B. Hematopoietic, TNM, ICDO3 (NAACCR) p. E-52
51A. Lymphoma, TNM (NAACCR) p. E-57
51B. Lymphoma, TNM, ICDO3 (NAACCR) p. E-58
74A. Primary Site, No AJCC Scheme-Ed 5, ICDO3 (NAACCR) p. E-71
74B. Primary Site, No AJCC Staging Scheme-Ed 5 (NAACCR) p. E-72
160A. Summary Stage 2000, TNM N (NAACCR) p. E-96
160B. Summary Stage, TNM N (NAACCR) p. E-99
175. TNM-Emptiness Check (MCR-CIMS) p. E-107

field: **TNM Path Stage Group** (called Pathologic Stage Grouping in MCR Manual)
edits: 173. TNM Path Stage Group (COC) p. E-106
40A. Hematopoietic, TNM (NAACCR) p. E-50
40B. Hematopoietic, TNM, ICDO3 (NAACCR) p. E-52
74A. Primary Site, No AJCC Scheme-Ed 5, ICDO3 (NAACCR) p. E-71
74B. Primary Site, No AJCC Staging Scheme-Ed 5 (NAACCR) p. E-72
168. TNM Clin Stage Group, TNM Path Stage Group (COC) p. E-104
175. TNM-Emptiness Check (MCR-CIMS) p. E-107

field: **TNM Path T** (called Pathologic T in MCR Manual)
edits: 174. TNM Path T (COC) p. E-106
40A. Hematopoietic, TNM (NAACCR) p. E-52
40B. Hematopoietic, TNM, ICDO3 (NAACCR) p. E-52
51A. Lymphoma, TNM (NAACCR) p. E-57
51B. Lymphoma, TNM, ICDO3 (NAACCR) p. E-58
74A. Primary Site, No AJCC Scheme-Ed 5, ICDO3 (NAACCR) p. E-71
74B. Primary Site, No AJCC Staging Scheme-Ed 5 (NAACCR) p. E-72
175. TNM-Emptiness Check (MCR-CIMS) p. E-107

field: **Tobacco History**
edit: 176. Tobacco History (MCR-CIMS) p. E-107

field: **Type of Reporting Source**

edits: 180. Type of Reporting Source (SEER RPRTSRC) p. E-108
14B. Behavior, Summary Stage 2000 (NAACCR) p. E-42
19. Class of Case, Type of Reporting Source (NAACCR) p. E-43
34A. EOD--Reg Nodes Ex,Reg Nodes Pos, Prim Site (NAACCR) p. E-49
34B. EOD--Reg Nodes Ex,ReNodes Pos, Site, ICDO3 (NAACCR p. E-49
36A. EOD--Tumor Size, Primary Site (NAACCR) p. E-50
36B. EOD--Tumor Size, Primary Site, ICDO3 (NAACCR) p. E-51
39. Hemato, Summ Stage, Type of Report Srce (NAACCR) p. E-52
40A. Hematopoietic, TNM (NAACCR) p. E-52
40B. Hematopoietic, TNM, ICDO3 (NAACCR) p. E-52
158. Summary Stage 2000, Site, Hist, Rpt Srce (NAACCR) p. E-94
177. Type of Report Srce(DC/AO), Date of Dx (SEER IF02) p. E-107
178. Type of Report Srce(DC/AO), Diag Conf (SEER IF05) p. E-108
179. Type of Report Srce(DC/AO), Vit Stat (COC) p. E-108

field: **Vendor Name** (called Vendor Name / Version Number in MCR Manual)

edits: none

field: **Vital Status**

edits: 184. Vital Status (COC) p. E-110
20. Class, Date Diag, Date Last Cont, Vit Stat (COC) p. E-44
67. Place of Death, Vital Status (NAACCR) p. E-64
179. Type of Report Srce(DC/AO), Vit Stat (COC) p. E-108

field: **Year First Seen This CA** (called Year Fist Seen for This Primary in MCR Manual)

edits: 185. Year First Seen This CA (COC) p. E-110
114. RX Hosp--Scope Reg LN Sur,RX Hosp--Reg LN Ex (COC p. E-82
141A. RX Summ--Scope Reg LN Sur, Primary Site (COC) p. E-89
141B. RX Summ--Scope Reg LN Sur, Primary Site, ICDO3(COC) p. E-89
186. Year First Seen This CA, Date of DX (NAACCR) p. E-110

Descriptions of MCR Automated Edits

1. **Abstracted By (NAACCR)**

field involved: Abstracted By (3 characters long)

This edit is a simple character check.

The field cannot contain symbols or leading spaces.

The field cannot be empty.

We ordinarily expect this field to contain only uppercase letters, but this edit will also allow lowercase letters, numbers and embedded spaces. We would not normally expect to alter what you have sent us in this field, but we run this edit so that we can detect problems with the field (such as being sent in empty).

---

2. **Addr at DX--City (NAACCR)**

field involved: Addr at DX--City (20 characters long)

This is a simple character check.

The field may only contain letters and embedded spaces.

The field cannot contain symbols or leading spaces.

The field cannot be empty, even for non-analytic cases. (Please remember to enter "Unknown" when necessary.)

3A. **Addr at DX--Postal Code (NAACCR)**
3B **Addr at DX--Postal Code (NAACCR/MCR-CIMS)**

field involved: Addr at DX--Postal Code (9 characters long)

The standard NAACCR edit (3A.) is a simple character check.

The field may only contain letters and numbers. (Allowing letters makes it possible to include the Canadian Postal Codes, for example.)

The field cannot contain symbols or spaces.

The field cannot be empty.

The MCR-modified version of the edit (3B.) is run only in the Scan Edit Set. It complains when the postal code starts with five **9**'s. The unknown code is valid, but we have had a problem in the past with files being sent in with a *large* percentage of unknown postal codes. We use this edit to identify files with too many unknown postal codes that may have to be rejected.

---

4. **Addr at DX--State (NAACCR)**

field involved: Addr at DX--State (2 letters long)

This is a validity check.

The field can only contain a valid 2-letter code for U.S. states, Canadian provinces, or the special codes **XX**, **YY** or **ZZ**. Valid codes are on page 58 in the MCR Manual and pages 57-58 in the ROADS Manual. The edit uses a look-up table of valid codes.

The field cannot be empty.

---

5. **Address at dx--No & Street (MCR-CIMS)**

field involved: Addr at DX--No & Street (25 characters long)

This is a simple blank check.

The field can contain any type of character -- letters, numbers, symbols, a leading space, and embedded spaces.

The field cannot be empty.

The MCR modified a standard version of this edit to allow symbols that may make the address easier for us to interpret. Having elements included in this field like "1/2", "Apt #4" or "Bldg D-2" provides us with the detailed information necessary to locate a residence as specifically as possible.

---

6. **Age at Diagnosis (SEER AGEDX)**

field involved: Age at Diagnosis (3 digits long)

This is a validity check.

The field can only contain a 3-digit number from **000** through **120**, or the special code **999**.

The field cannot contain letters, symbols or spaces.

The field cannot be empty.

(The COC version of this edit allows the field to be empty because the field is not required by the COC.)

---

7. **Age at Diagnosis, Text--Usual Industry (NAACCR/MCR**

fields involved: Age at Diagnosis
Birth Date
Class of Case
Date of Diagnosis
Text--Usual Industry

This edit runs only in the MCR Scan Edit Set. This edit checks that the industry narrative is filled for any patient old enough to have worked (fourteen years old). Please fill in the text "unknown" if you have checked the medical record and could find no usual type of industry. Fill in "student" if a teen has no job or you can't find one in the record.

If the patient's age > **013** then the narrative usual industry cannot be empty.

The edit skips whenever the year of diagnosis is before **1996**. If the patient's age is empty for a case record, the edit uses Birth Date and Date of Diagnosis to calculate it so that it need not skip.

Because the MCR does not require narratives to be filled for most nonanalytic cases, the edit skips when Class of Case=**3**, **4**, **6**, **9**.

---

8. **Age at Diagnosis, Text--Usual Occupation (NAACCR/MCR**

fields involved: Age at Diagnosis
Birth Date
Class of Case
Date of Diagnosis
Text--Usual Occupation

This is a companion to the preceding edit and it also runs only in the Scan Edit Set. This edit checks that the occupation narrative is filled for any patient old enough to have worked (fourteen). Please fill in the text "unknown" if you have checked the medical record and could find no usual occupation. Fill in "student" if a teen has no job or you can't find one in the record.

If the patient's age > **013** then the narrative usual occupation cannot be empty.

The edit skips whenever the year of diagnosis is before **1996**. If the patient's age is empty for a case record, the edit uses Birth Date and Date of Diagnosis to calculate it so that it need not skip.

Because the MCR does not require narratives to be filled for most nonanalytic cases, the edit skips when Class of Case=**3**, **4**, **6**, **9**.

---

9. **Age, Birth Date, Date of Diagnosis (NAACCR IF13)**

fields involved: Age at Diagnosis
Birth Date
Date of Diagnosis

This edit checks that these three fields are in agreement.
This edit is skipped for a case record if any of the three fields has failed its validity check.

If both dates are known (that is, no unknown years or months or days), then the edit uses all of these elements (even down to the days) to calculate an age; then it checks that the coded age is the same.

If either date is partially or completely unknown, then just the known parts are used to calculate the age.

The patient's age can only be coded as completely unknown (**999**) if the birth year or diagnosis year (or both) is coded as unknown (**9999**). (Remember that we would prefer an estimated age to a complete unknown; also, an unknown diagnosis year is useless to the MCR because we cannot even determine if that case is reportable to us.)

10A. **Age, Primary Site, Morphology (NAACCR IF15)**

fields involved: Age at Diagnosis
Behavior (92-00) ICD-O-2
Histology (92-00) ICD-O-2
Primary Site

This edit looks at the patient's age and ICD-O-2 diagnosis. If the disease is unusual for someone of this age, the edit asks for a double-check of the data.

This edit is skipped for a case record if any of the validity checks on the involved fields has failed. It skips if the ICD-O-2 Behavior and Histology are empty.

The following combinations of age and diagnosis require review:

Age	Primary Site	Histologic Type	Behavior
under 15 years	cervix uteri (**C530-C539**)	any	*in situ* (**2**)
	placenta (**C589**)	choriocarcinoma (**9100**)	any
under 20 years	colon (**C180-C189**) trachea (**C339**) lung and bronchus (**C340-C349**)	any except carcinoid tumor (**8240-8244**)	any
	esophagus (**C150-C159**) small intestine (**C170-C179**) rectosigmoid (**C199**) rectum (**C209**) anus and anal canal (**C210-C218**) gallbladder (**C239**) other biliary tract (**C240-C249**) pancreas (**C250-C259**) pleura (**C384**) breast (**C500-C509**) corpus uteri (**C540-C549**) uterus, NOS (**C559**)	any	any
	cervix uteri (**C530-C539**)	any	malignant (**3**)
under 30 years	any	multiple myeloma (**9732**) chronic lymphocytic leukemia (**9823**) chronic myeloid leukemia (**9863**, **9868**) monocytic leukemia, NOS (**9890**)	malignant (**3**)
	penis (**C609**)	any	any
under 45 years	prostate (**C619**)	adenocarcinoma, NOS (**8140**)	any
over 5 years	eye (**C690-C699**)	retinoblastoma (**9510-9512**)	any
over 14 years	any	Wilms's tumor (**8960**)	any
over 45 years	placenta (**C589**)	choriocarcinoma (**9100**)	any

This edit has an over-ride ("Age/Site/Morph").

10B. **Age, Primary Site, Morphology ICDO3 (NAACCR IF15)**

fields involved: Age at Diagnosis
Behavior Code ICD-O-3
Histologic Type ICD-O-3
Primary Site

This is the ICD-O-3 version of the preceding edit

This edit is skipped for a case record if any of the validity checks on the involved fields has failed. It skips if the ICD-O-3 behavior and histology are empty.

The following combinations of age and diagnosis require review:

Age	Primary Site	Histologic Type	Behavior
under 15 years	cervix uteri (**C530-C539**)	any	*in situ* (**2**)
	placenta (**C589**)	choriocarcinoma (**9100**)	any
under 20 years	colon (**C180-C189**) trachea (**C339**) lung and bronchus (**C340-C349**)	any except carcinoid tumor (**8240-8245**)	any
	esophagus (**C150-C159**) small intestine (**C170-C179**) rectosigmoid (**C199**) rectum (**C209**) anus and anal canal (**C210-C218**) gallbladder (**C239**) other biliary tract (**C240-C249**) pancreas (**C250-C259**) pleura (**C384**) breast (**C500-C509**) corpus uteri (**C540-C549**) uterus, NOS (**C559**)	any	any
	cervix uteri (**C530-C539**)	any	malignant (**3**)
under 30 years	any	multiple myeloma (**9732**) chronic lymphocytic leukemia (**9823**) chronic myeloid leukemia (**9876**, **9945**) monocytic leukemia, NOS (**9946**)	malignant (**3**)
	penis (**C609**)	any	any
under 45 years	prostate (**C619**)	adenocarcinoma, NOS (**8140**)	any
over 5 years	eye (**C690-C699**)	retinoblastoma (**9510-9514**)	any
over 14 years	any	Wilms tumor (**8960**)	any
over 45 years	placenta (**C589**)	choriocarcinoma (**9100**)	any

This edit has an over-ride ("Age/Site/Morph").

11A. **Behavior (COC)**

field involved: Behavior (92-00) ICD-O-2 (1 digit long)

This is a simple validity check.

Valid codes are **0**, **1**, **2** and **3**.

The field cannot be empty.

12A. **Behavior Code, Histologic Type (NAACCR/MCR-CIMS)**

fields involved: Behavior (92-00) ICD-O-2
Date of Diagnosis (year only)
Histology (92-00) ICD-O-2
Primary Site

The only morphologies with borderline/uncertain (/**1**) behaviors in ICD-O-2 that should appear in *most* central registry data systems are those that now appear in ICD-O-3 with an invasive (/**3**) behavior:

8931	endolymphatic stromal myosis	**9980**	refractory anemia
9393	papillary ependymoma	**9981**	refractory anemia without sideroblasts
9538	papillary meningioma	**9982**	refractory anemia with sideroblasts
9950	polycythemia vera	**9983**	refractory anemia with excess of blasts
9960	chronic myeloproliferative disease	**9984**	refractory anemia with excess of blasts in transformation
9961	myelosclerosis with myeloid metaplasia		
9962	idiopathic thrombocythemia	**9989**	myelodysplastic syndrome

If the diagnosis year>**2000** and the ICD-O-2 behavior=**1** and the ICD-O-2 histologic type code is one of those listed above, the standard version of this edit passes; otherwise it fails.

Because the MCR collects brain/CNS cancers having benign and borderline behaviors, however, our data system has many other ICD-O-2 borderline morphologies than just those that have become invasive. The standard version of this edit would reject all of those borderline cases that are reportable to the MCR. Our modification of the edit does this: if ICD-O-2 behavior=**1** and diagnosis year<**2001** and ICD-O-2 histologic type is one of those above (except **9393** or **9538**, which may typically appear in the brain/CNS sites), the edit fails.

13A. **Behavior ICDO2, Date of Diagnosis (NAACCR)**

fields involved: Behavior (92-00) ICD-O-2
Date of Diagnosis (year only)

This edit checks that the ICD-O-2 Behavior code is not empty for any diagnosis made before 2001.

If the year of diagnosis<**2001** and the ICD-O-2 Behavior is empty, the edit fails.

11B. **Behavior ICDO3 (COC)**

field involved: Behavior Code ICD-O-3 (1 digit long)

This is a simple validity check.

Valid codes are **0 - 3**; the field may also be empty (the edit that immediately follows checks that it is not empty for any case diagnosed in 2001 and thereafter).

13B. **Behavior ICDO3, Date of Diagnosis (NAACCR)**

fields involved: Behavior Code ICD-O-3
Date of Diagnosis (year only)

This edit checks that the ICD-O-3 Behavior code is not empty for any diagnosis made after 2000.

If the year of diagnosis>**2000** (but not **9999**) and the ICD-O-3 Behavior is empty, the edit fails.

12B. **Behavior ICDO3, Histologic Type ICDO3 (NAACCR/MCR)**

fields involved: Behavior Code ICD-O-3
Date of Diagnosis (year only)
Histologic Type ICD-O-3
Primary Site

The only morphologies with borderline/uncertain (/**1**) behaviors in ICD-O-3 that should appear in *most* central registry data systems are those that appeared in ICD-O-2 with an invasive (/**3**) behavior:

8442 serous cystadenoma, borderline malignancy
8451 papillary cystadenoma, borderline malignancy
8462 serous papillary cystic tumor of borderline malignancy
8472 mucinous cystic tumor of borderline malignancy
8473 papillary mucinous cystadenoma, borderline malignancy

If the diagnosis year<**2001** and the ICD-O-3 behavior=**1** and the ICD-O-3 histologic type code is one of those listed above, the standard version of this edit passes; otherwise it fails.

Because the MCR collects brain/CNS cancers having benign and borderline behaviors, however, our data system has many other ICD-O-3 borderline morphologies than just those that have become invasive. The standard version of this edit would reject all of those borderline cases that are reportable to the MCR. Our modification does this: if the ICD-O-3 behavior=**1** and diagnosis year>**2000** and ICD-O-3 histologic type is one of those above, the edit fails.

Note that pilocytic astrocytomas (**9421**) also appear in ICD-O-2 with /**3** and in ICD-O-3 with /**1**, but it is the practice of most North American registries to make the ICD-O-3 behavior /**3** for these cancers.

14A. **Behavior, Summary Stage (NAACCR)**

fields involved: Behavior (92-00) ICD-O-2
SEER Summary Stage 1977

This edit checks for basic agreement between the ICD-O-2 behavior and the 1977 Summary Stage.

If the ICD-O-2 behavior is *in situ* (/**2**), then the Summary Stage 1977 must be **0** (*in situ*) or **9** (unknown, unstaged*). If the ICD-O-2 behavior is invasive (/**3**), then the Summary Stage 1977 can't be **0** (*in situ*).

This edit skips for a case record if the Summary Stage 1977 is empty.

* This edit takes into account that a death certificate-only case may have an unknown Summary Stage by default, regardless of the diagnosis.

14B. **Behavior, Summary Stage 2000 (NAACCR)**

fields involved: Behavior Code ICD-O-3
SEER Summary Stage 2000
Type of Reporting Source

This is the ICD-O-3/Summary Stage 2000 version of the preceding edit. The edit checks for basic agreement between the ICD-O-3 behavior and the Summary Stage 2000.

If the ICD-O-3 behavior is *in situ* (/**2**), then the Summary Stage 2000 must be **0** (*in situ*). Invasive ICD-O-3 behavior is not checked here.

The edit skips if the Summary Stage 2000 is empty. It skips for death certificate-only cases (Type of Reporting Source=**7**).

---

15. **Birth Date (NAACCR DATEEDIT)**

field involved: Birth Date (8 digits long)

This is a validity check, but it's not simple.

Valid day codes are **01** - **31** and **99**. The edit is smart enough to know which months have no 31st's and which years have February 29th's.

Valid month codes are **01** - **12** and **99**.

Valid year codes are **9999** and any year between 150 years ago* and today.

The edit only allows sensible use of the unknown codes. If the year is unknown, then the entire date must be unknown. If the year is known but the month is unknown, then the day must also be unknown.

The edit checks year first, then month, and then day; and it stops checking as soon as it finds something wrong. For example, if the year is OK but both the day and month are badly coded (**77 77 1999**, for example), the edit will validate the year, then detect the bad month code, and then stop -- it will not bother to check the day, so you will only get an error message complaining about the bad month code. This does not mean that the edit thinks that a day of **77** is valid -- it just did not bother to check the day code because it found the month problem first.

No part of the field may be blank. No letters, symbols or spaces are accepted. If the month or day is coded **00**, then the month or day is considered to be "missing" entirely.

This edit produces a variety of error messages. Depending on what type of error the edit had detected when it stopped, you may see a message like "######## is an invalid date", "invalid as to year", "invalid as to month", "invalid as to day**", "missing the year", "missing the month", or "missing the day".

Invalid parts of the date are checked for first (year, then month, then day), and "missing" parts of the date are checked for after this (year, then month, then day). For example, if the year is valid but the month is **00** and the day is **33** (**00 33 1999**), the edit will detect the invalid day code first and complain about that; having stopped there, the edit will not get around to detecting the "missing" month code.

* even though the maximum age that can be coded is 120 years

** Actually, you will see the message "invalid as *today*" because this error message contains a typo.

---

16. **Birth Date, Date of Diagnosis (NAACCR IF47)**

fields involved: Birth Date
Date of Diagnosis

This edit compares the two dates to see if they make sense together. The two dates may be identical, but diagnosis date cannot be earlier than birth date.*

This edit is skipped if either field has failed its validity check. It also skips if either year is coded unknown (**9999**).

If one or both dates is partially unknown, the edit only compares the known parts of the two dates. For example, if the birth date is **99991944** and the diagnosis date is **03032000**, the edit will only compare the two years.

* Although cancer diagnoses are being made before birth, the edit will not allow this. If your data system allows you to store a diagnosis date that precedes the birth date, we must ask that the diagnosis date be changed to equal the eventual birth date when such cases are exported for the MCR; otherwise, please explain the situation in a narrative field.

---

17. **Birthplace (SEER POB)**

field involved: Birthplace (3 digits long)

This is a simple validity check. It uses a look-up table of valid codes.

Valid codes are in MCR Manual Appendix A (Appendix C codes in the ROADS Manual are somewhat out-of-date).

The field cannot be empty.

---

18. **Class of Case (COC)**

field involved: Class of Case (1 digit long)

This is a simple validity check.

Valid codes are **0** - **6**, **8*** and **9**.

The field cannot be empty.

* Although Class 8 cases (death certificate-only cases) should not be reported *to* the MCR, we enter them onto our data system ourselves. When we do so, this edit allows that code onto our system. If a facility reports a case to us coded with a Class of **8**, our system will not detect anything unusual and will process that case like any other.

---

19. **Class of Case, Type of Reporting Source (NAACCR)**

fields involved: Class of Case
Type of Reporting Source

This edit checks for basic agreement between some Classes of Case and the Type of Reporting Source code.

If the Class indicates no diagnosis until an autopsy (**5**), then the Type of Reporting Source must indicate that the case information came from an autopsy (**6**); and vice versa (if Type of Reporting Source=**6** then Class=**5**).

If the Class indicates a death certificate-only case (**8**), then the Type of Reporting Source must indicate that the case information came from a death certificate (**7**); and vice versa.

The edit skips if either field is empty.

20. **Class, Date Diag, Date Last Cont, Vit Stat (COC)**

fields involved: Class of Case
Date of Diagnosis (year only)
Date of Last Contact (year only)
Vital Status

If a case wasn't diagnosed until death (on autopsy or death certificate), then the patient must be dead and the diagnosis and last contact dates should be the same (the death date). The edit checks the 4 fields for this agreement (well, really only the years of diagnosis and last contact have to be the same for the edit to be happy).

If Class of Case=**5** (autopsy) or Class=**8** (death certificate only), then year of last contact=diagnosis year and Vital Status=**0** (dead).

This edit produces a single error message saying that the 4 fields are in conflict. It does not specify, for example, if just the Vital Status code conflicts with the Class.

---

21. **Date Case Completed (MCR-CIMS)**

field involved: Date Case Completed (8 digits long)

This is a date validity check. See Edit #15 on page E-42 for a description of what a date validity check does.

Although you may not have to fill this field in on your data system (your system may fill the field in for you), we need to run a validity check on it to be sure that the field is being filled correctly. The edit runs only in our Scan Set.

The field cannot be empty.

---

22. **Date Case Exported (MCR-CIMS)**

field involved: Date Case Record Exported (8 digits long)

This is a date validity check. See Edit #15 on page E-42 for a description of what a date validity check does.

This edit runs only in the Scan Edit Set. Your data system should be filling this field with the date on which each case record was put onto a floppy diskette for us. MCR staff cannot change the values in this field from within our data system. If you receive reports of cases failing this edit, then your data system is not putting some valid date into this field.

The field cannot be empty.

---

23. **Date of 1st Crs RX--COC (COC)**

field involved: Date of 1st Crs RX--COC (8 digits long)

This is a treatment date validity check.

A *treatment* date validity check is similar to the date validity check Edit #15 on page E-42, but it allows the date to be zero-filled; that is, if the year is **0000**, then the entire date must be zeroes; if *only* the month and/or day is **00**, or if *only* the year is **0000**, the edit will complain.

The field cannot be empty.

---

24. **Date of 1st Crs RX--COC, Date Last Contact (COC)**

involved fields: Date of 1st Crs RX--COC
Date of Last Contact

This is a date comparison edit. The last contact date can be identical to the starting date for first-course cancer-directed treatment, but the last contact date cannot precede the other date.

The edit is skipped for a case record if either date has failed its validity check.

If no first-course cancer-directed treatment was given (Date of 1st Crs RX--COC is coded **00000000**), then this edit is skipped for that case record.

If either year is coded unknown (**9999**), then the edit is skipped for that case record.

If either date is partially unknown (or both), then the edit only compares the known parts of the two dates.

Note that this edit is not checking Date of Last Contact against the *latest* starting treatment date that may be recorded, but rather against the *earliest* starting treatment date.

---

25. **Date of 1st Crs RX--COC, Date of DX (COC)**

fields involved: Date of 1st Crs RX--COC
Date of Diagnosis

This is a date comparison edit. The diagnosis date can be identical to the treatment starting date, but treatment cannot start before diagnosis.

If either date is empty, the edit is skipped for that case record.

If no first-course cancer-directed treatment was given (Date of 1st Crs RX--COC is coded **00000000**), then this edit is skipped for that case record.

If either year is coded unknown (**9999**), then the edit is skipped for that case record.

If either date is partially unknown (or both), then the edit only compares the known parts of the two dates.

---

26. **Date of 1st Crs RX--COC, Dates of RX (NAACCR)**

fields involved: Date of 1st Crs RX--COC
RX Date--BRM
RX Date--Chemo
RX Date--Hormone
RX Date--Other
RX Date--Radiation
RX Date--Surgery

This edit compares the starting treatment date with the start dates of each cancer-directed treatment modality. The *overall* starting date cannot be later than any of the individual start dates.

The edit skips for a case record if any of the dates involved is empty. It skips if all of the treatment modality dates are zero-filled (because, if no treatment was done, the Date of 1st Crs RX may be zero-filled or may be some real date on which it was decided to do no treatment).

If any of the treatment modality dates is not zero-filled, then the Date of 1st Crs RX can't be zero-filled.

The Date of 1st Crs RX must be the earliest non-zero-filled treatment modality start date.

This edit is being modified by NAACCR to allow the possibility that you know a certain modality was the first treatment given, yet you cannot specify its date. For example, you may know that the patient had surgery first at another facility and then your facility later gave radiation; if you cannot estimate the surgery date, you will 9-fill its starting date field and therefore must 9-fill the overall treatment starting date. The MCR will <u>not</u> be adopting this modification at this time.

---

27. **Date of Adm/1st Contact (NAACCR DATEEDIT)**

field involved: Date of First Contact (8 digits long)

This is a date validity check. See Edit #15 on page E-42 for a description of what a date validity check does.

---

28. **Date of Diagnosis (NAACCR DATEEDIT)**

field involved: Date of Diagnosis (8 digits long)

This is a date validity check. See Edit #15 on page E-42 for a description of what a date validity check does.

---

29. **Date of Last Contact (NAACCR DATEEDIT)**

field involved: Date of Last Contact (8 digits long)

This is a date validity check. See Edit #15 on page E-42 for a description of what a date validity check does.

---

30. **Date of Last Contact, Date of Diag. (NAACCR IF19)**

fields involved: Date of Diagnosis
Date of Last Contact

This is a date comparison edit. The two dates may be identical, but the last contact cannot precede the diagnosis.

If either date has failed its validity check, this edit is skipped for that case record.

If either year (or both) is unknown (**9999**), the edit is skipped for that case record.

If either date (or both) is partially unknown, then only the known parts of the dates are compared.

---

31. **Diagnostic Confirmation (SEER DXCONF)**

field involved: Diagnostic Confirmation (1 digit long)

This is a simple validity check.

Valid codes are **1**, **2**, **4** - **9**.

The field cannot be empty.

32A. **Diagnostic Confirmation, Behavior Code (SEER IF31)**

fields involved: Behavior (92-00) ICD-O-2
Diagnostic Confirmation

This edit checks that cases coded with an *in situ* ICD-O-2 behavior have been microscopically confirmed.

The edit is skipped for a case record if either field has failed its validity check or if the ICD-O-2 behavior is empty.

If the ICD-O-2 behavior=**2** and the Diagnostic Confirmation is *not* **1**, **2** or **4**, the edit asks that the data be reviewed.

There is an over-ride for this edit (the "Histology" over-ride flag must be set to 2 or 3).

The edit text offers this advice on cases questioned by the edit:

> "The distinction between *in situ* and invasive is very important to a registry, since prognosis is so different, and *in situ* cases are usually excluded from incidence rate calculations. Since the determination that a neoplasm has not invaded surrounding tissue, i.e., is not *in situ*, is made via the microscope, cases coded *in situ* in behavior should have a microscopic confirmation code. However, very rarely, a physician will designate a case non-invasive or *in situ* without microscopic evidence. Check carefully for any cytologic or histologic evidence that may have been missed in coding. Correction of errors may require inspection of the abstracted text.... Review of the original medical record may also be required. If upon review all items are correct as coded, an over-ride flag may be set so that the case will not be considered in error when the edit is run again. Set the Over-ride--Histology field to 2 (or 3, if the flag is also being set for the Morphology--Type&Behavior (SEER MORPH) edit)."

Note that staging codes are not checked by this edit. The edit uses only the ICD-O-2 behavior to determine if a case has been categorized as *in situ*.

32B. **Diagnostic Confirmation, Behavior ICD03 (SEER IF31)**

fields involved: Behavior Code ICD-O-3
Diagnostic Confirmation

This is the ICD-O-3 version of the preceding edit. The edit checks that cases coded with an *in situ* ICD-O-3 behavior have been microscopically confirmed.

If the ICD-O-3 behavior=**2** and the Diagnostic Confirmation is *not* **1**, **2** or **4**, the edit asks that the data be reviewed.

There is an over-ride for this edit (the "Histology" over-ride flag must be set to 2 or 3).

The edit text offers the same advice for passing this edit as in the preceding edit.

33A. **Diagnostic Confirmation, Histologic Typ(SEER IF48)**

fields involved: Diagnostic Confirmation
Histology (92-00) ICD-O-2

The edit checks that diagnoses of lymphomas, leukemias, other lymphoreticular neoplasms, plasma cell tumors, mast cell tumors, and immunoproliferative diseases have been adequately confirmed.

If a lymphoma has been diagnosed by direct visualization (Diagnostic Confirmation = **6**) or clinically (Diagnostic Confirmation = **8**), the edit asks for review of the data.

If a leukemia (or other high-coded histology) has been diagnosed by direct visualization, the edit questions the data. Remember that positive hematologic findings and bone marrow specimens are considered histologic confirmation for leukemias (Diagnostic Confirmation = **1**).

The edit requires review of the following code combinations:

Histology ICD-O-2 = **9590 - 9717**	and	Diagnostic Confirmation = **6** or **8**
Histology ICD-O-2 = **9720 - 9941**	and	Diagnostic Confirmation = **6**

The edit is skipped for a case record if either field has failed its validity check or if the ICD-O-2 histology is empty.

There is an over-ride for this edit ("Leuk, Lymphoma".

33B. **Diagnostic Confirmation, Histology ICD03(SEER IF48**

fields involved: Diagnostic Confirmation
Histologic Type ICD-O-3

This is the ICD-O-3 version of the preceding edit. It works exactly the same way. Lymphomas are defined with ICD-O-3 code range **9590 - 9729**, and leukemias and the other high-coded histologies are defined by **9731 - 9948**.

The edit is skipped for a case record if either field has failed its validity check or if the ICD-O-3 histology is empty.

There is an over-ride for this edit ("Leuk, Lymphoma".

34A. **EOD--Reg Nodes Ex,Reg Nodes Pos, Prim Site (NAACCR)**

fields involved: Behavior (92-00) ICD-O-2
Date of Diagnosis (year only)
Histology (92-00) ICD-O-2
Primary Site
Regional Nodes Examined
Regional Nodes Positive
Type of Reporting Source

This edit checks that Regional Nodes Examined and Positive make sense together. It also checks that these two fields are coded correctly for certain diagnoses and cases. It produces a variety of error messages.

The edit skips if the ICD-O-2 Histology, Regional Nodes Examined or Regional Nodes Positive is empty. It skips for diagnoses made before **1998** and for any case record without an ICD-O-2 *in situ* (/**2**) or invasive (/**3**) behavior.

If Regional Nodes Examined=**00** (none examined), then Regional Nodes Positive=**98** (none examined).

If Regional Nodes Examined=**01 - 89** (specified number examined), then Regional Nodes Positive≤Regional Nodes Examined or Nodes Positive=**97** or **99** (an uncertain number positive, or you don't know if any were positive).

If Regional Nodes Examined=**90** (90+ examined), then Regional Nodes Positive=**00 - 97**, **99** (none or any number positive is OK; you don't know if any were positive is also OK).

If Regional Nodes Examined=**95** (aspiration), then Regional Nodes Positive=**00**, **97** or **99** (none were positive, an unknown number were positive, or you don't know if any nodes examined were positive).

If Regional Nodes Examined=**96-98** (uncertain number examined), then Regional Nodes Positive=**00 - 97**, **99** (none or any number positive is OK; you don't know if any were positive is also OK).

If Regional Nodes Examined=**99** then Regional Nodes Positive=**99**.

Regional Nodes Examined and Regional Nodes Positive must both be coded **99** for these cases:

death certificate-only cases (Type of Reporting Source=**7**);

ICD-O-2 hematopoietic diseases (**9720 - 9989**);

ICD-O-2 lymphomas (**9590 - 9698**, **9702 - 9717**);

brain and other CNS primaries (**C700-C709**, **C710-C719**, **C720-C729**) except Kaposi's sarcomas (**9140**);

other/ill-defined sites (**C420-C424**, **C760-C768**, **C770-C779**, **C809**) except Kaposi's sarcomas (**9140**).

For all other cases, if *in situ* (ICD-O-2 behavior=**2**), Regional Nodes Positive must indicate that no nodes were positive (**00** or **98**) and Regional Nodes Examined <>**99**.

34B. **EOD--Reg Nodes Ex,ReNodes Pos, Site, ICDO3 (NAACCR**

fields involved: Behavior Code ICD-O-3
Date of Diagnosis (year only)
Histologic Type ICD-O-3
Primary Site
Regional Nodes Examined
Regional Nodes Positive
Type of Reporting Source

This is the ICD-O-3 version of the preceding edit. It skips when the diagnosis year<**1998**, ICD-O-3 Behavior<>**1-3**, or the ICD-O-3 histology or nodes examined or nodes positive is empty.

The edit performs the same checks as the ICD-O-2 version. The ICD-O-3 diagnoses that require Regional Nodes Examined and Regional Nodes Positive to be **99** are the same as in the preceding edit, except as follows:

hematopoietic diseases (**9731-9732**, **9740-9758**, **9760-9989**) and lymphomas (**9590-9699**, **9702-9729**).

---

35. **EOD--Tumor Size (COC)**

field involved: EOD--Tumor Size (3 digits long)

This edit is a simple character check.

The field should contain 3 numbers.

The field cannot contain letters, symbols or spaces. It should not contain only 1 or 2 digits.

The field cannot be empty.

36A. **EOD--Tumor Size, Primary Site (NAACCR)**

fields involved: Behavior (92-00) ICD-O-2
Date of Diagnosis (year only)
EOD--Tumor Size
Histology (92-00) ICD-O-2
Primary Site
Type of Reporting Source

There are some special valid tumor size codes for certain ICD-O-2 diagnoses. This edit checks that the tumor size is not an invalid code for these diagnoses.

The edit skips if the diagnosis year<**1998**, the ICD-O-2 Behavior<>**2** or **3**, or the ICD-O-2 Histology or tumor size is empty.

For the following ICD-O-2 cases, valid tumor size codes are **000 - 990**, **998**, **999**:

esophagus primaries (**C150 - C159**);

familial/multiple polyposis of colon, rectosigmoid junction or rectum (**C180 - C209**, **8200 - 8221**);

bronchus and lung primaries (**C340 - C349**).

For breast primaries (**C500 - C509**), valid tumor size codes are **000 - 990**, **997 - 999**.

For mycosis fungoides (**9700**) or Sezary's disease (**9701**) of skin (**C440 - C449**), vulva (**C510 - 519**), penis (**C600 - C601**, **C608 - C609**), or scrotum (**C632**), valid tumor size codes are **000 - 003***, **999**.

For Kaposi's sarcoma (**9140**) and Hodgkin's disease and non-Hodgkin's lymphomas (**9590-9595**, **9650-9698**, **9702-9717**), valid tumor size codes are **001 - 002****, **999**.

For hematopoietic diseases (**9720**, **9722**, **9731-9732**, **9740-9741**, **9760-9768**, **9800-9941**, **9950-9989**) and death certificate-only cases (Type of Reporting Source=**7**), only code **999** is valid for tumor size.

For all other cases, valid tumor size codes are **000 - 990**, **999**.

* SEER uses codes **000-003** to indicate peripheral blood involvement status for these cases; the MCR does not collect this information, so we do not want codes 000-003 for these cases. Rather than modify this edit to disallow these codes, we check our data system for them periodically and change them to **999**.

** SEER uses codes 001 and 002 to indicate HIV status for these cases; the MCR does not collect such information, so we do not want codes 001 and 002 for these cases. Rather than modify this edit to disallow these codes, we check our data system for them periodically and change them to **999**.

36B. **EOD--Tumor Size, Primary Site, ICDO3 (NAACCR)**

fields involved: Behavior Code ICD-O-3
Date of Diagnosis (year only)
EOD--Tumor Size
Histologic Type ICD-O-3
Primary Site
Type of Reporting Source

This is the ICD-O-3 version of the preceding edit.

The edit skips if diagnosis year<**1998**, ICD-O-3 behavior<>**1-3**, or the ICD-O-3 histology or tumor size is empty.

For the following ICD-O-3 cases, valid tumor size codes are **000 - 990**, **998**, **999**:

esophagus primaries (**C150 - C159**);

familial/multiple polyposis of colon, rectosigmoid junction or rectum (**C180 - C209**, **8200 - 8221**);

bronchus and lung primaries (**C340 - C349**).

For breast primaries (**C500 - C509**), valid tumor size codes are **000 - 990**, **997 - 999**.

For mycosis fungoides (**9700**) or Sezary syndrome (**9701**) of skin (**C440 - C449**), vulva (**C510 - 519**), penis (**C600 - C601**, **C608 - C609**), or scrotum (**C632**), valid tumor size codes are **000 - 003***, **999**.

For Kaposi sarcoma (**9140**) and Hodgkin and non-Hodgkin lymphomas (**9590-9699**, **9702-9729**), valid tumor size codes are **001 - 002****, **999**.

For hematopoietic diseases (**9731-9734**, **9750-9752**, **9760-9989**) and death certificate-only cases (Type of Reporting Source=**7**), only code **999** is valid for tumor size.

For all other cases, valid tumor size codes are **000 - 990**, **999**.

* SEER uses codes **000-003** to indicate peripheral blood involvement status for these cases; the MCR does not collect this information, so we do not want codes 000-003 for these cases. Rather than modify this edit to disallow these codes, we check our data system for them periodically and change them to **999**.

** SEER uses codes 001 and 002 to indicate HIV status for these cases; the MCR does not collect such information, so we do not want codes 001 and 002 for these cases. Rather than modify this edit to disallow these codes, we check our data system for them periodically and change them to **999**.

---

37. **Grade (COC)**

field involved: Grade (1 digit long)

This is a simple validity check.

Valid codes are **1 - 9** (any single digit).

The field cannot be empty.

---

38. **Hemato, Summ Stage, Class of Case (NAACCR)**

fields involved: Class of Case
Histology (92-00) ICD-O-2
SEER Summary Stage 1977

This edit checks that Summary Stage 1977 = **7** (systemic disease) for ICD-O-2 hematopoietic and reticuloendothelial neoplasms (**9720**, **9722-9723**, **9732**, **9740-9741**, **9760-9989**).

The edit skips if Summary Stage 1977 is empty. It also skips for death certificate-only cases (Class of Case=**8**).

39. **Hemato, Summ Stage, Type of Report Srce (NAACCR)**

fields involved: Histology (92-00) ICD-O-2
SEER Summary Stage 1977
Type of Reporting Source

This is the same as the preceding edit, but it uses Type of Reporting Source=**7** to identify the death certificate cases.

40A. **Hematopoietic, TNM (NAACCR)**

fields involved: Class of Case
Date of Diagnosis (year only)
Histology (92-00) ICD-O-2
TNM Clin T
TNM Clin N
TNM Clin M
TNM Clin Stage Group
TNM Path T
TNM Path N
TNM Path M
TNM Path Stage Group
Type of Reporting Source

This edit checks that the TNM fields are coded correctly for certain ICD-O-2 cases.

Hematopoietic and reticuloendothelial neoplasms (ICD-O-2 histologies **9720**, **9722-9723**, **9731-9732**, **9740-9741**, **9760-9989**) have no AJCC staging schemes, so all of the TNM fields above must be coded **88**.

The edit skips when the diagnosis year<**1996**. It also skips if all of the TNM fields above are empty. It also skips for death certificate-only cases (Class of Case=**8** or Type of Reporting Source=**7**).

40B. **Hematopoietic, TNM, ICDO3 (NAACCR)**

fields involved: Class of Case
Date of Diagnosis (year only)
Histologic Type ICD-O-3
TNM Clin T
TNM Clin N
TNM Clin M
TNM Clin Stage Group
TNM Path T
TNM Path N
TNM Path M
TNM Path Stage Group
Type of Reporting Source

This is the ICD-O-3 version of the preceding edit. It does exactly what the preceding edit does, but it defines the diagnoses using ICD-O-3 histologies: **9731 - 9989**.

41A. **Histologic Type (COC)**

field involved: Histology (92-00) ICD-O-2 (4 digits)

This is a very simple validity check (just a code range check, really).

The edit checks that the ICD-O-2 histology code is within the range **8000 - 9989** or is empty (as it could be for diagnoses made after 2000).

41B. **Histologic Type ICDO3 (COC)**

field involved: Histologic Type ICD-O-3 (4 digits)

This is a very simple validity check. It's the ICD-O-3 version of the preceding edit.

The edit checks that the ICD-O-3 histology code is within the range **8000 - 9989** or is empty (as it could be for diagnoses made before 2001).

42A. **Histology ICDO2, Date of Diagnosis (NAACCR)**

fields involved: Date of Diagnosis (year only)
Histology (92-00) ICD-O-2

This is a blank check. It checks that the ICD-O-2 histology is not empty for diagnosis years<**2001**.

The edit skips if Date of Diagnosis fails its validity check.

---

43. **Histology ICDO2, Histology ICDO3 (NAACCR)**

fields involved: Histologic Type ICD-O-3
Histology (92-00) ICD-O-2

This is a double blank check. If both the ICD-O-2 and ICD-O-3 histology fields are empty, the edit fails.

42B. **Histology ICDO3, Date of Diagnosis (NAACCR)**

fields involved: Date of Diagnosis (year only)
Histologic Type ICD-O-3

This is a blank check, checking that the ICD-O-3 histology is not empty for diagnosis years>**2000** (except unknown year code **9999**).

The edit skips if Date of Diagnosis fails its validity check.

---

44. **ICD-O-3 Conversion Flag (NAACCR)**

field involved: ICD-O-3 Conversion Flag (1 digit)

This is a simple validity check.

The ICD-O-3 Conversion Flag must be a valid code **0 - 4** (codes **2** and **4** do not really apply, but they may be used).

The field may also be empty.

---

45. **Invalid City/Town Name (MCR-CIMS)**

field involved: Addr at DX--City (20 characters long)

This edit is run only when a case record in the MCR's data system is submitted to the system's "master database" by one of our staff. The edit is not in our Scan Edit Set and should not be of concern to our reporting facilities.

This edit prevents non-Massachusetts residents' cases from getting onto our "master database". It also prevents misspellings of town names and non-standard spellings. (Mass. city/town names are standardized during upload to MCR-CIMS.) The edit compares the reported city/town name with a look-up table of Massachusetts city/town names that we consider to be valid.

---

46. **Invalid Zipcode (MCR-CIMS)**

field involved: Addr at DX--Postal Code (9 characters long)

This edit is run only when a case record in the MCR's data system is submitted to the system's "master database" by one of our staff. The edit is not in our Scan Edit Set and should not be of concern to our reporting facilities.

This edit prevents non-Massachusetts residents' cases from getting onto our "master database". The edit compares the reported Postal Code with a look-up table of Massachusetts ZIP Codes that we consider to be valid.

---

47. **Laterality (SEER LATERAL)**

field involved: Laterality (1 digit long)

This is a simple validity check.

Valid codes are **0** - **4** and **9**.

The field cannot be empty.

---

48. **Laterality, Primary Site (NAACCR IF24)**

fields involved: Laterality
Primary Site

The edit checks that the laterality is *not* coded "not paired" for purely paired primary sites. That is, for paired sites, the Laterality code cannot be **0**.

The edit is skipped for a case record if either field has failed its validity check.

The primary sites that are considered "paired" for this edit follow:

C079	parotid gland	**C471**	peripheral nerves & autonomic nervous system, upper limb, shoulder
C080	submandibular gland	**C472**	peripheral nerves & autonomic nervous system, lower limb, hip
C081	sublingual gland	**C491**	connective, subcutaneous & other soft tissues, upper limb, shoulder
C090	tonsillar fossa	**C492**	connective, subcutaneous & other soft tissues, lower limb, hip
C091	tonsillar pillar	**C50_**	breast
C098	tonsil, overlapping	**C569**	ovary
C099	tonsil, NOS	**C570**	fallopian tube
C301	middle ear	**C62_**	testis
C310	maxillary sinus	**C630**	epididymis
C312	frontal sinus	**C631**	spermatic cord
C341	lung, upper lobe	**C649**	kidney, NOS
C342	lung, middle lobe*	**C659**	renal pelvis
C343	lung, lower lobe	**C669**	ureter
C348	lung, overlapping	**C69_**	eye & adnexa
C349	lung, NOS	**C74_**	adrenal gland
C384	pleura, NOS	**C754**	carotid body
C400	long bones of upper limb, scapula, joints		
C401	short bones of upper limb, joints		
C402	long bones of lower limb, joints		
C403	short bones of lower limb, joints		
C441	skin, eyelid		
C442	skin, external ear		
C443	skin, other and unspecified parts of face		
C445	skin, trunk		
C446	skin, upper limb, shoulder		
C447	skin, lower limb, hip		

Site codes which may or may not be paired, depending on the exact part of the site where the tumor began, are not checked by this edit because *any* valid laterality code may be appropriate for those site codes. For example, if the primary site is the carina (**C340**), the site is not paired and laterality should be coded **0**; but if the primary site is the main bronchus (also coded **C340**), the site is paired and laterality may be any valid code except **0**.

The edit ignores all purely unpaired primary sites. That is, if the site is coded **C169** for stomach and the laterality is coded **1** for "right side origin", this incorrect combination is not checked by the edit at all.

* Although a middle lung lobe is found on the right side only, this is considered a paired site by this edit.

49A. **Laterality, Primary Site, Morph ICDO3 (NAACCR IF42)**

fields involved: Behavior Code ICD-O-3
Date of Diagnosis (year only)
Histologic Type ICD-O-3
Laterality
Primary Site

This edit checks that *in situ* (ICD-O-3 Behavior = **2**) lesions in purely paired primary sites are specified as originating in one side only (Laterality = **1 - 3**).

The edit skips if the ICD-O-3 histology is empty. It skips if any of the involved fields has failed its validity check. It skips for ICD-O-3 lymphomas and leukemias (any histology ≥ **9590**). It skips for Kaposi sarcoma (**9140**), mycosis fungoides (**9700**), and Sezary syndrome (**9701**) diagnosed after 1987.

The edit asks for the data to be reviewed for the following code combinations:

ICD-O-2 behavior = **2** and Laterality ≠ **1**, **2** or **3** and Primary Site below:

C079	parotid gland	**C446**	skin, upper limb, shoulder
C080	submandibular gland	**C447**	skin, lower limb, hip
C081	sublingual gland	**C471**	peripheral nerves & autonomic nervous system, upper limb, shoulder
C090	tonsillar fossa		
C091	tonsillar pillar	**C472**	peripheral nerves & autonomic nervous system, lower limb, hip
C098	tonsil, overlapping		
C099	tonsil, NOS	**C491**	connective, subcutaneous & other soft tissues, upper limb, shoulder
C301	middle ear		
C310	maxillary sinus	**C492**	connective, subcutaneous & other soft tissues, lower limb, hip
C312	frontal sinus		
C341	lung, upper lobe	**C50_**	breast
C342	lung, middle lobe*	**C569**	ovary
C343	lung, lower lobe	**C570**	fallopian
C348	lung, overlapping	**C62_**	testis
C349	lung, NOS	**C630**	epididymis
C384	pleura, NOS	**C631**	spermatic cord
C400	long bones of upper limb, scapula, joints	**C649**	kidney, NOS
C401	short bones of upper limb, joints	**C659**	renal pelvis
C402	long bones of lower limb, joints	**C669**	ureter
C403	short bones of lower limb, joints	**C69_**	eye & adnexa
C441	skin, eyelid	**C74_**	adrenal gland
C442	skin, external ear	**C754**	carotid body

Site codes which may or may not be paired, depending on the exact part of the site where the tumor began, are not checked by this edit. For example, a non-invasive lesion said to originate in the nostril (site **C300**) with a Laterality code of **4** or **9** would not be questioned by this edit because the same site code could be indicating origin in the unpaired nasal septum.

The edit ignores all purely unpaired primary sites. That is, an *in situ* lesion with site coded **C189** for left colon and laterality coded **4** for "side of origin is unknown but both sides are involved" would not be questioned by this edit.

Staging is not checked by this edit. Only the Behavior Code is used to determine if a case has been called *in situ*.

This edit has an over-ride ("Site/Lat/Morph").

* Although a middle lung lobe is found on the right side only, this is considered a paired site by this edit.

49B. **Laterality, Primary Site, Morphology (NAACCR IF42)**

fields involved: Behavior (92-00) ICD-O-2
Date of Diagnosis (just the year)
Histology (92-00) ICD-O-2
Laterality
Primary Site

This is the ICD-O-2 version of the preceding edit.

This edit is skipped for a case record if any of the involved fields has failed its validity check or if the ICD-O-2 Histology is empty.

The edit asks for the data to be reviewed for the same code combinations that appear in the preceding edit, but it is the ICD-O-2 Behavior that is being checked here.

The ICD-O-2 Histology and Date of Diagnosis are involved because lymphomas, leukemias, etc. (ICD-O-3 histology $\geq$ **9590**) are not checked by this edit. The edit does not check Kaposi sarcomas (**9140**), mycosis fungoides (**9700**) or Sezary syndrome (**9701**) diagnosed in 1988 or afterward.

This edit has an over-ride ("Site/Lat/Morph").

---

50. **Lymphoma, Primary Site, Summary Stage (NAACCR)**

fields involved: Histology (92-00) ICD-O-2
Primary Site
SEER Summary Stage 1977

This edit checks that the Summary Stage 1977 code makes sense for ICD-O-2 nodal lymphomas.

If Primary Site=**C770-C779** (lymph nodes) and ICD-O-2 histology=**9590-9595**, **9650-9698**, **9702-9717**, then Summary Stage 1977<>**3**, **4** (regional nodes involved).

If Primary Site=**C778** (multiple node regions involved) and histology=as above, then Summary Stage 1977<>**1** (localized).

The edit skips if the Summary Stage 1977 is empty.

51A. **Lymphoma, TNM (NAACCR)**

fields involved: Histology (92-00) ICD-O-2
TNM Clin T
TNM Clin N
TNM Clin M
TNM Path T
TNM Path N
TNM Path M

This edit checks that all of the TNM elements are coded **88** for ICD-O-2 lymphomas (**9590-9698**, **9702-9717**) because the TNM elements do not apply to these cases.

The edit skips if the ICD-O-2 histology is empty. It also skips if all of the TNM elements are empty.

51B. **Lymphoma, TNM, ICDO3 (NAACCR)**

fields involved: Histologic Type ICD-O-3
TNM Clin T
TNM Clin N
TNM Clin M
TNM Path T
TNM Path N
TNM Path M

This is the ICD-O-3 version of the preceding edit. This edit checks that all of the TNM elements are coded **88** for ICD-O-3 lymphomas (**9590-9699**, **9702-9729**) because the TNM elements do not apply to these cases.

The edit skips if the ICD-O-3 histology is empty. It also skips if all of the TNM elements are empty.

---

52. **Marital Status at DX (SEER MARITAL)**

field involved: Marital Status at DX (1 digit long)

This is a simple validity check.

Valid codes are **1** - **5** and **9**.

The field cannot be empty.

---

53. **Marital Status at DX, Age at Diagnosis (SEER IF14)**

fields involved: Age at Diagnosis
Marital Status at DX

This edit checks that patients under 15 years of age are coded as being "never married". Even if a marital status is not specified in the medical record, assume that someone this young has never married and code Marital Status as **0** rather than **9**. Finding any Marital Status code other than **0** with an age under 15 makes us suspect that there may have been a typographical error in entering the patient's birth date, leading to an erroneous Age at Diagnosis.

The edit is skipped for a case record if either field has failed its validity check.

---

54. **MCR-CIMS Master Db Edits**

fields involved: Addr at DX--State
Date of Diagnosis (year only)

This edit is run only when a case record in the MCR's data system is submitted to the system's "master database" by one of our staff. The edit is not in our Scan Edit Set and should not be of concern to our reporting facilities.

This edit prevents case records from being added to our data system's master database if they are not cases that we want stored there. Our master database is meant to contain only cases diagnosed in Massachusetts residents as of January 1, 1995. All other cases are stored in different areas on our data systems.

The edit fails for all cases with State not coded as **MA**, **ma**, **Ma** or **Am**. If the state was incorrectly coded as "MA" (for Maine, for example), the edit would assume that this was Mass. case. If Massachusetts was incorrectly coded (as "MS", for example), the edit would assume that this was a non-Mass. resident.

The edit fails for all diagnosis years less than **1995**.

---

55. **MCR-CIMS (NOT REPORTABLE CASE)**

fields involved: Behavior Code ICD-O-3 and Behavior (92-00) ICD-O-2
Class of Case
Date of Diagnosis (year only)
Histologic Type ICD-O-3 and Histology (92-00) ICD-O-2
Primary Site

This edit only runs when a case record in the MCR data system is submitted to our "master database" by our staff. The edit should not concern reporting facilities, unless we find that you are sending in many cases that are non-reportable to us.

The Class of Case code **6** became valid as of 1996. Any Class **6** case diagnosed before 1996 is not reportable to us.

The MCR stopped collecting certain diseases diagnosed as of January 1, 1998. This edit is supposed to prevent such cases diagnosed after 1997 from being stored on our data system's master database. (There are standard edits which stop other types of disease that are not reportable to the MCR, such as non-melanoma skin cancers.)

For diagnoses made in 1998 and afterward, the MCR stopped collect cases of *in situ* carcinoma of the cervix (CIS), cervical intraepithelial neoplasia (CIN), prostatic intraepithelial neoplasia (PIN), vaginal intraepithelial neoplasia (VAIN), and vulvar intraepithelial neoplasia (VIN). When the diagnosis year is 1998 or afterward, the following code combinations are used by the edit to identify these unwanted cases:

site = **C51_** or **C529**	and	behavior = **2** or **3**		and	histology = **8077**
site = **C53_**	and	behavior = **2**		and	histology = **8000-8110**
site = **C619**	and	behavior = **2**	(combination over-rideable)		

The last part of this edit has an over-ride because a valid *in situ* prostate case is possible. PIN does not have specific codes to represent its diagnosis (that is, it may be reported with different histologies). If a case is coded in this way, our staff must determine if the disease being reported is PIN or *in situ*.

56A. **Morphology--Type&Behavior (SEER MORPH)**

fields involved: Behavior (92-00) ICD-O-2
Grade
Histology (92-00) ICD-O-2 (4 digits long)

This edit serves as the validity check on histology, but it's a complex edit that does several other things. There are different error messages attached to the edit, and the error message(s) you may see is determined by exactly what went wrong. One specific check performed by the edit is over-rideable (Part 2c below), while all other checks are pass/fail.

1.) The edit first checks that the histologic type code is any 4 digits between **8000** and **9999**. Any other code generates the error message "Histologic Type not valid".

2.) The edit then checks that only a valid code between **8000** and **9999** has been entered for histologic type. What does the edit consider to be a "valid" code? The edit goes to a huge look-up bin of codes that represents the entire ICD-O-2 coding system for histologic type, behavior and grade. Note that this part of the edit is only examining the 4-digit histologic type code and its default behaviors as listed in ICD-O-2. It is not looking at the Behavior Code reported in the case record.

a.) Any code not listed at all in ICD-O-2 generates the "Histologic Type not valid" error message.
example: Code **8005** is invalid because it does not appear in ICD-O-2.

b.) Any code listed in ICD-O-2 with a default behavior code of **2** or **3** (or both) is considered valid by the edit.
example: Code **8000** (for neoplasm) is valid because it appears in the book followed by a behavior of **3**.

c.) The edit questions the validity of any code in ICD-O-2 that only appears with a default behavior of **0** or **1**. There is an over-ride to allow the code to pass the edit if the data are reviewed and found to be correct.
example: code **8040** (for tumorlet) generates the error message "Benign Histology - Please Review" because it only appears in ICD-O-2 with a "/1".
If our staff examines the case record and finds that this is a benign brain/CNS cancer being reported, we can use the over-ride to accept the code; or, if a histology usually considered to be benign or uncertain in behavior is being "elevated" to a non-invasive or invasive behavior, we can use the over-ride to accept the code.

3.) Next, the edit looks at the Grade code reported in the case record in combination with the histology type code reported.*

a.) T-cell, B-cell, Null cell and Natural Killer cell origins (Grade codes **5 - 8**) are only allowed with lymphomas, leukemias and related diseases (ICD-O-2 histologies **9590 - 9941**). The error message "Grade not valid" will be generated if this part of the edit fails. Note that the edit is limiting Grade codes **5 - 8** to this histology range but, conversely, lymphomas and leukemias are allowed to have any valid Grade code (**1 - 9**).

b.) Histologies having a specific degree of differentiation implicit in their ICD-O-2 definitions must be reported with the appropriate Grade code only. The following histologies are limited to their implied grades:

8020/3**4** **undifferentiated** carcinoma
8021/3**4** **anaplastic** carcinoma
8331/3**1** **well differentiated** follicular adenocarcinoma
8851/3**1** **well differentiated** liposarcoma
9062/3**4** **anaplastic** seminoma
9082/3**4** **undifferentiated** malignant teratoma
9083/3**2** **intermediate type** malignant teratoma
9401/3**4** **anaplastic** astrocytoma
9451/3**4** **anaplastic** oligodendroglioma
9511/3**1** **differentiated** retinoblastoma
9512/3**4** **undifferentiated** retinoblastoma

One of these histologies reported with a different Grade code generates the error message "Grade & Histology conflict".

c.) Lymphoma/leukemia Grade codes can describe the cell type in which the disease originated or the degree of differentiation of the involved cells. (If both the cell type origin and differentiation are known, the cell type code has priority.) Lymphoma histologies having a specific degree of differentiation implicit in their ICD-O-2 definitions must be reported with that corresponding differentiation Grade code or one of the cell type origin Grade codes ("5"-"8"). The following histologies are limited to the following Grade codes by this part of the edit:

9693/3	malignant lymphoma, lymphocytic, **well differentiated**, nodular	valid Grade codes **5**-**8** or **1**
9694/3	malignant lymphoma, lymphocytic, **intermediate differentiated**, nodular	valid Grade codes **5**-**8** or **2**
9696/3	malignant lymphoma, lymphocytic, **poorly differentiated**, nodular	valid Grade codes **5**-**8** or **3**

4.) Finally, the edit looks at the reported Behavior Code and reported Histologic Type code. Only certain histologies are listed in ICD-O-2 with a default behavior of "/2". Other histologies cannot be assigned an in situ or non-invasive behavior in the ICD-O-2 coding system. SEER provides the following explanation for this part of the edit:

> "In situ" is a concept that only pertains to epithelial neoplasms; therefore, an in situ behavior is not allowed with non-epithelial morphologies, such as sarcomas, leukemias, and lymphomas. In situ behavior is also disallowed for a handful of codes representing epithelial neoplasms which, by their nature, cannot be in situ.

The following Histologic Type codes combined with a Behavior Code of **2** will produce the error message "Invalid Histology for In Situ":

8000 .....neoplasm
8001 .....tumor cells
8002 .....small cell type malignant tumor
8003 .....giant cell type malignant tumor
8004 .....fusiform cell type malignant tumor
8020 .....undifferentiated carcinoma
8021 .....anaplastic carcinoma
8331 .....well differentiated follicular adenocarcinoma
8332 .....trabecular follicular adenocarcinoma
8800-9054.....sarcomas, fibromas, myomas, mixed & stromal neoplasms, fibroepithelial neoplasms, synovial-like neoplasms, mesothelial neoplasms except cystic mesotheliomas
9062 .....anaplastic seminoma
9082 .....undifferentiated malignant teratoma
9083 .....intermediate malignant teratoma
9110-9491, 9501-9989..mesonephromas, blood vessel and lymphatic vessel tumors, bone and tooth tumors, miscellaneous tumors, gliomas, neuroepitheliomatous neoplasms except neuroblastomas, meningiomas, nerve sheath tumors, granular cell tumors & alveolar soft part sarcoma, lymphomas, leukemias, and other related diseases

Only Part 2c of the edit has an over-ride ["Histology" is set to **1** if just this edit is being overridden; it's set to **3** if this edit and the SEER IF31 edits (on behavior/diagnostic confirmation) are being overriden].

The edit skips if the ICD-O-2 histology is empty.

* Note that the AJCC staging system includes grade codes (GX and G1-G3 or G1-G4), but these are not necessarily identical to the ICD-O Grade code collected by the MCR. Page 8 in the 5th Edition AJCC staging manual lists 5 histologic types that are automatically assigned a G4 grade code within the AJCC staging system but, except for undifferentiated carcinomas, the ICD-O Grade is not limited to code **4**.

56B. **Morphology--Type&Behavior ICDO3 (SEER MORPH)**

fields involved: Behavior Code ICD-O-3
Date of Diagnosis (year only)
Grade
Histologic Type ICD-O-3

This is the ICD-O-3 version of the preceding edit.

Part 1) is the same as in the preceding edit.

Part 2) is the same, i.e, it checks for valid ICD-O-3 4-digit histologic type codes. Part 2c) has some exceptions: ICD-O-3 histologies **8442**, **8451**, **8462**, **8472** and **8473** are allowed to have a ICD-O-3 behavior of /**1** if the diagnosis year<**2001**. These codes had invasive ICD-O-2 behaviors.

Part 3a) allows Grades **5 - 8** with ICD-O-3 histologies **9590 - 9948**.

Part 3b) has not been updated for new ICD-O-3 terms with an implied grade. It may be updated in future editions of the edits. ICD-O-2 code 9062/34 has been eliminated from this portion of the edit.

Part 3c) does not apply to this ICD-O-3 version of the edit.

Part 4) is the same, with the corresponding ICD-O-3 codes that cannot be *in situ* being:

8000-8005	**8331-8332**	**9062**	**9110-9989**
8020-8021	**8800-9055**	**9082-9083**	

Only Part 2c of the edit has an over-ride [Histology" is set to **1** if just this edit is being overridden; it's set to **3** if this edit and the SEER IF31 edits (on behavior and diagnostic confirmation) are being overriden]

The edit skips if the ICD-O-3 histology is empty.

---

57. **Name--Alias (COC)**

field involved: Name--Alias (15 characters long)

This is a simple character check.

The field may contain letters (upper or lower case), embedded spaces, embedded hyphens and apostrophes.

The field cannot contain other symbols or numbers.

The field may be empty.

---

58. **Name--First (MCR-CIMS)**

field involved: Name--First (14 letters long)

This is a simple character check.

The field may contain letters (upper or lower case) and embedded spaces.

The field cannot contain a leading space, symbols or numbers.

The field cannot be empty.

The ROADS Manual instructs you to leave this field blank if you don't know the patient's first name, and the COC's version of this edit allows the field to be empty. The MCR's data system relies heavily on this field, so a blank first name is useless to us. We modified the COC edit to disallow an empty first name.

---

59. **Name--Last (MCR-CIMS)**

field involved: Name--Last (25 characters long)

This is a simple character check.

The patient's last name can contain only letters (upper and lower case). It cannot contain numbers, spaces or symbols (including hyphens). If your data systems allows you to enter hyphens or embedded spaces into this field, your system should be removing them in the MCR's version of your case records (i.e., as your cases are exported and sent to a floppy diskette for the MCR, these unwanted characters are taken out. The hyphens and spaces remain as they were entered on your system, but the MCR does not have to remove these characters from your patients' names so that our system can accept them and match them against other facilities' patient names.

The field cannot be empty.

---

60. **Name--Maiden (MCR-CIMS)**

field involved: Name--Maiden (15 letters long)

This is a simple character check.

If a maiden name is being reported, the field may contain letters only (upper and lower case).

The field cannot contain numbers, spaces or symbols.

The field may be empty.

The ROADS Manual instructs that spaces and symbols are OK in this field, and the COC's version of this edit allows space, hyphens, etc. here. In order to be useful to the MCR as a matching field, we can only allow a maiden name to contain letters. The MCR therefore modified the COC's version of this edit to disallow the symbols, spaces, etc.

Note that no edits check this field against Sex, Marital Status or Age to see if the field is being filled for appropriate patients only.

---

61. **Name--Middle (NAACCR)**

field involved: Name--Middle (14 characters long)

This is a simple character check.

If a middle name (or initial) is being reported, the field may contain letters only (upper and lower case).

The field cannot contain spaces, symbols or numbers.

The field may be empty.

62. **Name--Suffix (COC)**

field involved: Name--Suffix (3 letters long)

This is a simple character check.

If a name suffix is being reported, the field may contain letters only (upper and lower case).

The field cannot contain spaces, symbols or numbers.

The field may be empty.

---

63. **Pediatric Stage (NAACCR)**

field involved: Pediatric Stage (2 characters long)

This is a simple validity check.

If letters are entered, they must be in upper case only. If only a single character is entered, it belongs on the left side.

The edit compares the reported code with codes stored in a look-up table. Valid codes are:

1_	**2_**	**3_**	**4_**	**5_**	**88**
1A	**2A**	**3A**	**4A**	**A_**	**99**
1B	**2B**	**3B**	**4B**	**B_**	
	2C	**3C**	**4S**	**C_**	
		3D		**D_**	
		3E		**DS**	

The field cannot be empty.

Note that no edit involving any of the pediatric staging fields checks the patient's age.

---

64. **Pediatric Stage, Pediatric Staging System (COC)**

fields involved: Pediatric Stage
Pediatric Staging System

This is a very simple field comparison.

The edit checks that if one of these fields indicates that the case is *not* pediatric (code **88**), then the other field also agrees that it is *not* pediatric. That is, if both fields are coded **88**, the edit will be passed; if one field is **88** and the other is anything but **88**, the edit will fail.

This is all that the edit does. It does not use the patient's reported age or diagnosis to try to verify if an **88** code is being used appropriately. There are no strict code-related definitions of what cases should be classified as pediatric, after all; but even a very typical pediatric case will pass this edit with **88** codes. For example, a retinoblastoma reported in an infant with two 88's in these fields will pass the edit.

The edit is also not comparing the two fields to ensure that the stage reported is a valid code in the staging system reported. Note that no edit involving any of the pediatric staging fields checks the patient's age.

---

65. **Pediatric Staging System (NAACCR)**

field involved: Pediatric Staging System (2 digits long)

This is a simple validity check.

Valid codes are **00** - **15**, **88**, **97** and **99**.

The field cannot be empty.

Note that no edit involving any of the pediatric staging fields checks the patient's age.

---

66. **Place of Death (NAACCR)**

field involved: Place of Death (3 digits long)

This is a simple validity check. It uses a look-up table.

Valid codes are in MCR Manual Appendix A. (Codes in Appendix C in the ROADS Manual have not been updated.)

The field cannot be empty, even for living patients (enter code **997** for them).

---

67. **Place of Death, Vital Status (NAACCR)**

fields involved: Place of Death
Vital Status

This edit looks for agreement between death place and vital status. It checks that living patients have a death place of "still alive" (**997**), and that dead patients have any other death place.

If Place of Death is coded **997**, Vital Status must be coded **1**. If Place of Death is *not* **997**, Vital Status must be coded **0**.

---

68. **Primary Payer at DX (NAACCR)**

field involved: Primary Payer at DX (2 digits)

This is a simple validity check.

Valid codes are:

00	**20**	**30**	**40**	**88**
01	**21**	**31**	**41**	**99**
02	**22**	**32**	**42**	
10			**43**	
			44	
			45	
			46	
			47	

The field cannot be empty.

---

69. **Primary Site (SEER SITE)**

field involved: Primary Site (letter "C" followed by 3 digits)

This is a simple validity check. The code reported must be a topography code listed in ICD-O-3.

The edit uses a look-up table of all valid codes.

The field cannot be empty.

70A. **Primary Site, Behavior Code (MCR-CIMS/SEER IF39)**

fields involved: Behavior (92-00) ICD-O-2
Histology (92-00) ICD-O-2
Primary Site

The edit is skipped for a case record if the ICD-O-2 histologic type code is empty. The edit is skipped if either ICD-O-2 Behavior or Primary Site has failed its validity check.

This edit does two different things. It has a SEER check, and a MCR check.

The SEER part of this edit questions a combination of *in situ* behavior and a vague primary site. SEER provides the following explanation and advice:

> Since the designation of *in situ* is very specific and almost always requires microscopic confirmation, it is assumed that specific information should also be available regarding the primary site. Conversely, if inadequate information is available to determine a specific primary site, it is unlikely that information about a cancer being *in situ* is reliable. Therefore this edit does not allow an *in situ* behavior code to be used with specified organ systems and ill-defined site codes.
> ...Check the information available about primary site and histologic type carefully. If a specific *in situ* diagnosis is provided, try to obtain a more specific primary site. A primary site within an organ system may sometimes be assumed based on the diagnostic procedure or treatment given or on the histologic type. If no more specific site can be determined, it is probably preferable to code a behavior code of **3**.

The edit questions the following primary sites when reported with an ICD-O-2 Behavior of **2**:

C269	gastrointestinal tract, NOS	**C689**	urinary system, NOS
C399	ill-defined sites within respiratory system	**C729**	nervous system, NOS
C559	uterus, NOS	**C759**	endocrine gland, NOS
C579	female genital tract, NOS	**C76_**	ill-defined sites
C639	male genital organs, NOS	**C809**	unknown primary site

Note that the edit does not look at staging fields. It solely uses the ICD-O-2 Behavior code to determine if the case is being called *in situ* or non-invasive.

The MCR part of this edit questions an uncertain or benign ICD-O-2 behavior with any non-meninges/brain/CNS primary site. Because the MCR collects cases with these behaviors *only* for meninges, brain and other central nervous system primaries, we need an edit to check that these behaviors are not submitted for other sites. The following code combinations are questioned by this part of the edit:

ICD-O-2 Behavior = **0** or **1** and Primary Site <> **C700** - **C729** (meninges, brain, other parts of CNS)

This edit has an over-ride (for both parts) called “Site/Behavior”.

(There is no logical relationship between the SEER and MCR parts of this edit. The MCR needed an edit to limit certain behaviors to certain primary sites, and this SEER edit just happened to involve the fields necessary to do that.)

70B. **Primary Site, Behavior Code ICDO3 (SEER IF39/MCR-**

fields involved: Behavior Code ICD-O-3
Histologic Type ICD-O-3
Primary Site

This is the ICD-O-3 version of the preceding edit.

It skips if the ICD-O-3 Histology is empty. It skips if the validity check on ICD-O-3 Behavior or Primary Site has failed.

It works just like the preceding SEER/MCR edit, using the ICD-O-3 Behavior instead of the ICD-O-2.

The same over-ride (“Site/Type”) applies to this edit.

71. **Primary Site, Histology Narratives check(MCR-CIMS)**

fields involved: Class of Case
Date of Diagnosis (year only)
Text--Histology Title (40 characters long)
Text--Primary Site Title (40 characters long)

This edit is a simple empty check on the Primary Site and Histology Narratives. It runs only in our Scan Edit Set.

This edit is automatically passed for a case record if the Class code is analytic (**0 - 2**), or the diagnosis year is coded as unknown (**9999**), or diagnosis year is less than **2000**.

Although filling in the primary site and histology narratives was never optional for analytic cases, the MCR has had problems receiving these text fields. We have found it necessary to impose an edit to check that they have been filled in.

For analytic cases and autopsy cases, this edit checks that these two narratives have been filled in whenever the diagnosis date is January 1, 2000 or afterward.

The edit fails if either narrative is empty (or both are empty) and this combination of codes is reported:

diagnosis year > **1999** and Class <> **3**, **4**, **6** or **9**

The same dual error message is generated ("Text--Primary Site Title, Text--Histology Title can not be blank") whether one or both of the narratives is empty.

Note that a case of Class **8** (diagnosis made on death certificate only) is not covered by this edit. Because MCR staff enter the data for Class 8 cases, we feel secure that their narrative fields will not be empty so we do not bother to check them.

If you are entering text into narrative fields but the MCR reports that we are receiving your narratives empty, there may be some kind of problem with your data system or your routine for exporting case records for the MCR. Be sure you know which narrative fields on your system are seen by the MCR.

72A. **Primary Site, Morphology-Imposs ICDO3 (SEER IF38)**

fields involved: Histologic Type ICD-O-3
Primary Site

This edit skips if the ICD-O-3 Histologic Type code is empty. It skips if either field has failed its validity check.

This edit checks that the ICD-O-3 site/histology codes in a case record do not represent a biologically "impossible" combination. It uses a look-up table of site/histology combinations that SEER considers impossible:

	Primary Site		**ICD-O-3 Histologic Type**	
1.	**C000-C009**	Lip	**8090-8098**	Basal cell carcinoma
2.	**C199** **C209** **C210-C218**	Rectosigmoid junction Rectum Anus and anal canal	**8090-8098**	Basal cell carcinoma
3.	**C480-C488**	Retroperitoneum and peritoneum	**8720-8790**	Melanomas
4.	**C300** **C301** **C310-C319**	Nasal cavity Middle ear Accessory sinuses	**9250-9342**	Osteosarcomas (Giant cell, Ewing, ondontogenic)
5.	**C381-C388**	Pleura and mediastinum	**8010-8671, 8940-8941** **8720-8790**	Carcinomas Melanomas
6.	**C470-C479** **C490-C499**	Peripheral nerves Connective tissue	**8010-8671, 8940-8941** **8720-8790**	Carcinomas Melanomas
7.	**C700-C709** **C710-C719** **C720-C729**	Meninges Brain Other central nervous system	**8010-8671, 8940-8941**	Carcinomas
8.	**C400-C419**	Bone	**8010-8060, 8075-8671, 8940-8941** **8720-8790**	Carcinomas (except squamous cell) Melanomas
9.	**C760-C768**	Ill-defined sites	**8720-8790** **8800-8811, 8813-8830, 8840-8921, 9040-9044** **8990-8991** **8940, 8941** **9120-9170** **9240-9252** **9540-9560** **9580-9582**	Melanomas Sarcoma except periosteal fibrosarcoma, dermatofibrosarcoma Mesenchymoma Mixed tumor, salivary gland type Blood vessel tumor Mesenchymal chondrosarcoma and giant cell tumors Nerve sheath tumor Granular cell tumor and alveolar soft part sarcoma

SEER offers lots of explanation and repetitive advice to help fix errors found by this edit (numbers in the "Specific Guidelines" section correspond to the row numbers in the table of bad code combinations above):

Combinations of site and type are designated as impossible by this edit because the combination is biologically impossible, i.e., the particular form of cancer does not arise in the specified site, or because standard cancer registry conventions have been established to code certain combinations in certain ways.

...The suggestions below are a starting point for analyzing an error, but are not a substitute for a medical decision.
General Guidelines:

First review the case for the following: 1.) Is the histologic type correctly coded?...Note that the code for "Cancer" and "Malignancy" (8000/3) is NOT interchangeable with the code for "Carcinoma, NOS" (8010/3), which refers only to a malignancy of epithelial origin. 2.) Is the primary site coded correctly? Check whether the site coded...could be instead the site of metastatic spread or the site where a biopsy was performed. If so, check for a more appropriate site.
Specific Guidelines:

1. Lip and Basal Cell Carcinoma: The codes for lip, C00.0-C00.9, are reserved for the vermilion border of the lip and specifically exclude skip of lip (the skin surrounding the vermilion of the lip proper) which has the code C44.0....The two

tissues, vermilion and skin of lip, are distinct, and basal cell carcinoma does not arise on the vermilion portion of the lip. A basal cell carcinoma of the lip should be assumed to have arisen on the skip of lip and be coded to C44.0. This will not be reportable to most cancer registries which do not collect basal cell skin cancers.

2. Rectosigmoid/Rectum/Anus and Basal Cell Carcinoma: There is a form of anal cancer called cloacogenic carcinoma, which is also called basaloid carcinoma, coded 8124 and 8123, respectively, in ICD-O-3. Try to determine if the case has arisen within the anal canal and should be coded 8123 or 8124. It is also possible that the cancer is a basal cell cancer of the SKIN of the anus (perianal skin surrounding the anal opening, which is histologically distinct from the mucous membrane in the interior of the anus). A basal cell carcinoma of the skin of the anus should be coded C44.5, skin of trunk, and is generally not reportable in cancer registries.

3. Retroperitoneum/Peritoneum and Melanomas: If melanoma is identified in peritoneal or retroperitoneal tissue, it is almost certainly metastatic to that site. Try to identify the primary site of the melanoma. If not primary can be determined, the standard convention in cancer registries is to code the primary site as skin, NOS, C44.9, which puts the case in the most likely site group for analysis. Most histologic type codes for melanomas in ICD-O-3 list skin, C44._, as the appropriate primary site.

4. Nasal Cavity/Middle Ear/Accessory Sinuses and Osteosarcomas: Osteosarcomas arise in bone, and the specified site code in ICD-O-3 is C40._ or C41._. Osteosarcomas arising in the areas of the nose, middle ear, and sinuses should be assumed to have arisen in the bones of the skull and their primary site coded C41.0.

5. Pleura/Mediastinum and Carcinomas or Melanomas: If a carcinoma or melanoma is identified in the pleura or mediastinum, it is almost certainly metastatic to that site. Try to identify the primary site of the carcinoma or melanoma. For a carcinoma, if no primary can be determined, code unknown primary site, C80.9. For a melanoma, if no primary can be determined, the standard convention in cancer registries is to code the primary site as skin, NOS, C44.9, which puts the case in the most likely site group for analysis. Most histologic type codes for melanomas in ICD-O-3 list skin, C44._, as the appropriate primary site.

6. Peripheral Nerves/Connective Tissue and Carcinomas or Melanomas: If a carcinoma or melanoma is identified in peripheral nerves or connective tissue, it is almost certainly metastatic to that site. Try to identify the primary site of the carcinoma or melanoma. For a carcinoma, if no primary can be determined, code unknown primary site, C80.9. For a melanoma, if no primary can be determined, the standard convention in cancer registries is to code the primary site as skin, NOS, C44.9, which puts the case in the most likely site group for analysis. Most histologic type codes for melanomas in ICD-O-3 list skin, C44._, as the appropriate primary site.

7. Meninges/Brain/Other CNS and Carcinomas: If a carcinoma is identified in the brain, meninges, or other central nervous system, it is almost certainly metastatic to that site. Try to identify the primary site of the carcinoma. Check that the tumor is indeed a carcinoma and not "Cancer" or "Malignancy" which would be coded 8000/3. If it is a carcinoma and no primary can be determined, code "Unknown primary site", C80.9.

8. Bone and Carcinomas or Melanomas: If a carcinoma or melanoma is identified in bone, it is almost certainly metastatic to that site. Try to identify the primary site of the carcinoma or melanoma. For a carcinoma, if no primary can be determined, code unknown primary site, C80.9. For a melanoma, if no primary can be determined, the standard convention in cancer registries is to code the primary site as skin, NOS, C44.9, which puts the case in the most likely site group for analysis. Most histologic type codes for melanomas in ICD-O-3 list skin, C44._, as the appropriate primary site.

9. Ill-defined Sites and Various Histologies: Some histologic types are by convention more appropriately coded to a code representing the tissue in which such tumors arise rather than the ill-defined region of the body, which contains multiple tissues. The table below shows for the histologic types addressed in this edit which site should be used instead of an ill-defined site in the range C76.0-C76.8.

Histologic Type Codes	**Histologic Types**	**Preferred Site Codes for Ill-Defined Primary Sites**
8720-8790	melanoma	**C44._**, skin
8800-8811, 8813-8830, 8840-8921, 9040-9044	sarcoma except periosteal fibrosarcoma and dermatofibrosarcoma	**C49._**, connective, subcutaneous & other soft tissues
8990-8991	mesenchymoma	**C49._**, connective, subcutaneous & other soft tissues
8940-8941	mixed tumor, salivary gland type	**C07._** for parotid gland; **C08._** for other & unspecified major salivary glands
9120-9170	blood vessel tumors, lymphatic vessel tumors	**C49._**, connective, subcutaneous & other soft tissues
9240-9252	mesenchymal chondrosarcoma and giant cell tumors	**C40._**, **C41._** for bone & cartilage; **C49._**, connective, subcutaneous & other soft tissues
9580-9582	granular cell tumor and alveolar soft part sarcoma	**C49._**, connective, subcutaneous & other soft tissues

Note that there is NO OVER-RIDE for this edit. When SEER says "impossible", they mean it.

72B. **Primary Site, Morphology-Impossible (SEER IF38)**

fields involved: Histology (92-00) ICD-O-2
Primary Site

This is the ICD-O-2 version of the preceding edit. It skips if ICD-O-2 Histology is empty. It skips if either field has failed its validity check. This is the ICD-O-2 version of the table of site/histology combinations that SEER considers impossible:

	Primary Site		**Histologic Type**	
1.	**C000-C009**	Lip	**8090-8096**	Basal cell carcinoma
2.	**C199** **C209** **C210-C218**	Rectosigmoid junction Rectum Anus and anal canal	**8090-8096**	Basal cell carcinoma
3.	**C480-C488**	Retroperitoneum and peritoneum	**8720-8790**	Melanomas
4.	**C300** **C301** **C310-C319**	Nasal cavity Middle ear Accessory sinuses	**9250-9340**	Osteosarcomas (Giant cell, Ewing's, ondontogenic)
5.	**C381-C388**	Pleura and mediastinum	**8010-8671, 8940-8941** **8720-8790**	Carcinomas Melanomas
6.	**C470-C479** **C490-C499**	Peripheral nerves Connective tissue	**8010-8671, 8940-8941** **8720-8790**	Carcinomas Melanomas
7.	**C700-C709** **C710-C719** **C720-C729**	Meninges Brain Other central nervous system	**8010-8671, 8940-8941**	Carcinomas
8.	**C400-C419**	Bone	**8010-8060, 8075-8671, 8940-8941** **8720-8790**	Carcinomas (except squamous cell) Melanomas
9.	**C760-C768**	Ill-defined sites	**8720-8790** **8800-8811, 8813-8830, 8840-8920, 9040-9044** **8990-8991** **8940, 8941** **9120-9170** **9240-9251** **9540-9560** **9580-9581**	Melanomas Sarcoma except periosteal fibrosarcoma, dermatofibrosarcoma Mesenchymoma Mixed tumor, salivary gland type Blood vessel tumor Mesenchymal chondrosarcoma and giant cell tumors Nerve sheath tumor Granular cell tumor and alveolar soft part sarcoma

The ICD-O-2 version of the "preferred site" table to replace C76._ looks like this:

Histologic Type Codes	**Histologic Types**	**Preferred Site Codes for Ill-Defined Primary Sites**
8720-8790	melanoma	**C44._**, skin
8800-8811, 8813-8830, 8840-8920, 9040-9044	sarcoma except periosteal fibrosarcoma and dermatofibrosarcoma	**C49._**, connective, subcutaneous & other soft tissues
8990-8991	mesenchymoma	**C49._**, connective, subcutaneous & other soft tissues
8940-8941	mixed tumor, salivary gland type	**C07._** for parotid gland; **C08._** for other & unspecified major salivary glands
9120-9170	blood vessel tumors, lymphatic vessel tumors	**C49._**, connective, subcutaneous & other soft tissues
9240-9251	mesenchymal chondrosarcoma and giant cell tumors	**C40._**, **C41._** for bone & cartilage; **C49._**, connective, subcutaneous & other soft tissues
9580-9581	granular cell tumor and alveolar soft part sarcoma	**C49._**, connective, subcutaneous & other soft tissues

Note that there is NO OVER-RIDE for this edit.

73A. **Primary Site, Morphology-Type Check (SEER IF25)**

fields involved: Histology (92-00) ICD-O-2
Primary Site

This edit compares the reported ICD-O-2 site/histology code combination with huge look-up tables of site/histology combinations that SEER considers to be compatible (i.e., diagnoses typical for that site). If it does not find the reported site/histology combination in the look-up tables, it questions the reported code combination as "not typical".

The list of "typical" site/histology combinations is too big to include here.

The edit skips if the ICD-O-2 Histology code is empty. The edit skips if either field has failed its validity check.

The edit has an over-ride called “Site/Type”.

The COC version of this edit considers basal and squamous cell carcinomas of non-genital skin sites to be valid site/histology combinations (because these skin cancers are now reportable under COC rules if the stage at diagnosis was at least a Stage Group II with a T3). This SEER version of the edit does *not* consider such cancers to be valid site/histology combinations because they are not reportable to SEER. The MCR uses the SEER version of the edit because these skins cancers are also non-reportable to us. We rely on this edit to stop those diagnoses from getting onto our main data system.

73B. **Primary Site, Morphology-Type ICDO3 (SEER IF25)**

fields involved: Histologic Type ICD-O-3
Primary Site

This is the ICD-O-3 version of the preceding edit. It skips if the ICD-O-3 Histologic Type code is empty or if either field has failed its validity check.

A table (in .pdf and Excel versions) representing the ICD-O-3 site/histology combinations that SEER considers typical is available at the SEER website/Administration section: http://seer.cancer.gov/Admin. It is under "ICD-O-3 SEER Site/Histology Validation List - 6/14/2001". It is sorted by site. It can be helpful to download this table (right-click on it and use "save target as....") so that you can search for an unusual histology code (in a text editor or software like Excel or Word) and see what sites SEER considers compatible with that histology.

The “Site/Type” over-ride also applies to this edit.

74A. .**Primary Site, No AJCC Scheme-Ed 5, ICDO3 (NAACCR)**

fields involved: Date of Diagnosis (year only)
Histologic Type ICD-O-3
Primary Site
TNM Clin T
TNM Clin N
TNM Clin M
TNM Clin Stage Group
TNM Path T
TNM Path N
TNM Path M
TNM Path Stage Group

This edit checks that sites with NO staging scheme in the *AJCC Cancer Staging Manual, Fifth Edition* have TNM fields filled with the "not applicable" code (**88**).

The edit skips if the ICD-O-3 Histologic Type code is empty. It skips for lymphomas (9590-9699, 9702-9729) because they should *not* have **88** in the Stage Group fields. It also skips if the year of diagnosis is before 1998 (when the *Fifth Ed*. became applicable).

If the Primary Site is one of these codes:

C173	Meckel diverticulum, small intestine
C254	islets of Langerhans, pancreas
C260, **C268**, **C269**	other and ill-defined digestive organs
C300, **C301**	nasal cavity and middle ear
C312, **C313**, **C318**, **C319**	accessory sinuses: frontal, sphenoid, overlapping lesion, NOS
C339	trachea
C379	thymus
C390, **C398**, **C399**	other and ill-defined sites within respiratory system and intrathoracic organs
C420-C424	hematopoietic and reticuloendothelial systems
C571-C574, **C577-C579**	other and unspecified female genital organs except fallopian tube
C630, **C631**, **C637-C639**	other and unspecified male genital organs except scrotum
C691, **C699**	cornea, NOS; eye, NOS
C700, **C701**, **C709**	meninges
C710-C719	brain
C720-C725, **C728-C729**	spinal cord, cranial nerves, and other parts of central nervous system
C740, **C741**, **C749**	adrenal gland
C750-C755, **C758**, **C759**	other endocrine glands and related structures
C760-C765, **C767**, **C768**	other and ill-defined sites
C809	unknown primary site

then the clinical TNM Elements, clinical Stage Group, pathologic TNM Elements and Pathologic Stage Group must all be coded **88**. If any of these fields is not **88**, the edit will fail.

Note that there is no version of this edit for previous editions of the AJCC staging manual. This edit assumes that the *Fifth Edition* of the AJCC staging manual was used for any case diagnosed in 1998 and later. This edit only checks for sites which have NO *Fifth Ed*. staging scheme at all (for any histology). Sites not listed above which *do* have a staging scheme in the *Fifth Ed*. will also require **88** in the TNM and Stage Group fields if the scheme does not apply to the particular case's *histology*.

74B. **Primary Site, No AJCC Staging Scheme-Ed 5 (NAACCR)**

fields involved: Date of Diagnosis (year only)
Histology (92-00) ICD-O-2
Primary Site
TNM Clin T
TNM Clin N
TNM Clin M
TNM Clin Stage Group
TNM Path T
TNM Path N
TNM Path M
TNM Path Stage Group

This edit skips for lymphomas defined by the ICD-O-2 Histology codes **9590 - 9698**, **9702 - 9717**, and it skips when the ICD-O-2 Histology code is empty. Otherwise, it is exactly the same as the preceding edit.

---

75. **Race 1 (SEER RACE)**

field involved: Race 1 (2 digits long)

This is a simple validation check.

Valid codes are: **01 - 14**
20 - 22
25 - 28
30 - 32
96 - 99

The field cannot be empty.

---

76. **Race 1, Race 2, Race 3, Race 4, Race 5 (NAACCR)**

fields involved: Race 1
Race 2
Race 3
Race 4
Race 5

This edit compares the codes in all five race fields to see if any of their basic coding rules are violated. Race 1 cannot be empty, but it is possible to fill only Race 1 and leave the remaining Race fields empty (for pre-2000 diagnoses). If Race 1 is unknown and the other Race fields are filled in, they must also be unknown. When the patient's races have been specified fully, then all subsequent Race fields must be coded "no further races documented" (**88**). A particular Race code (other than spaces, **88** or **99**) can only be used once.

If Race 2 is empty, then Race 3, Race 4 and Race 5 must be empty.

If Race 1=**99** and the other Race fields are not empty, they must all be **99**.

If Race 2=**88** then Race 3 must be **88**; if Race 3=**88** then Race 4 must be **88**; if Race 4=**88** then Race 5 must be **88**.

Unless it's **99**, the Race 1 code cannot be identical to Race 2, Race 3, Race 4 or Race 5; unless it's **88** or empty, the Race 2 code cannot be identical to Race 3, Race 4 or Race 5; except for **88** or empty fields, the Race 3 code cannot be identical to Race 4 or Race 5; except for **88** or empty fields, the Race 4 code cannot be identical to the Race 5 code.

---

77. **Race 2 (NAACCR)**

field involved: Race 2 (2 digits long)

This is a simple validation check.

Valid codes are: **01 - 14**
20 - 22
25 - 28
30 – 32
88
96 - 99

The field can also be empty or consist of two spacebars (blank spaces).

---

78. **Race 2, Date of DX (NAACCR)**

fields involved: Date of Diagnosis (year only)
Race 2

Multiracial coding became valid as of diagnosis year 2000. This edit checks that Race 2 is filled for diagnosis years 2000 and thereafter. (For diagnoses made before 2000, the field may be empty or filled.)

If the year of Diagnosis > **1999**, Race 2 must not be empty.

If the Date of Diagnosis is completely unknown (year = **9999**), the edit skips.

---

79. **Race 3 (NAACCR)**

field involved: Race 3 (2 digits long)

This is a simple validation check.

Valid codes are: **01 - 14**
20 - 22
25 - 28
30 – 32
88
96 - 99

The field can also be empty or two spacebars (blank spaces).

---

80. **Race 3, Date of DX (NAACCR)**

fields involved: Date of Diagnosis (year only)
Race 3

Multiracial coding became valid as of diagnosis year 2000. This edit checks that Race 3 is filled for diagnosis years 2000 and thereafter. (For diagnoses made before 2000, the field may be empty or filled.)

If the year of Diagnosis > **1999**, Race 3 must not be empty.

If the Date of Diagnosis is completely unknown (year = **9999**), the edit skips.

---

81. **Race 4 (NAACCR)**

field involved: Race 4 (2 digits long)

This is a simple validation check.

Valid codes are: **01 - 14**
20 - 22
25 - 28
30 – 32
88
96 - 99

The field can also be empty or two spacebars (blank spaces).

---

82. **Race 4, Date of DX (NAACCR)**

fields involved: Date of Diagnosis (year only)
Race 4

Multiracial coding became valid as of diagnosis year 2000. This edit checks that Race 4 is filled for diagnosis years 2000 and thereafter. (For diagnoses made before 2000, the field may be empty or filled.)

If the year of Diagnosis > **1999**, Race 4 must not be empty.

If the Date of Diagnosis is completely unknown (year = **9999**), the edit skips.

---

83. **Race 5 (NAACCR)**

field involved: Race 5 (2 digits long)

This is a simple validation check.

Valid codes are: **01 - 14**
20 - 22
25 - 28
30 – 32
88
96 - 99

The field can also be empty or 2 spacebars (blank spaces).

---

84. **Race 5, Date of DX (NAACCR)**

fields involved: Date of Diagnosis (year only)
Race 5

Multiracial coding became valid as of diagnosis year 2000. This edit checks that Race 5 is filled for diagnosis years 2000 and thereafter. (For diagnoses made before 2000, the field may be empty or filled.)

If the year of Diagnosis > **1999**, Race 5 must not be empty.

If the Date of Diagnosis is completely unknown (year = **9999**), the edit skips.

---

85. **Reason for No Surgery (SEER NCDSURG)**

field involved: Reason for No Surgery (1 digit long)

This is a simple validity check.

Valid codes are **0**, **1**, **2**, **6**, **7**, **8** and **9**.

The field cannot be empty.

---

86. **Regional Nodes Ex, Reg Nodes Pos (COC)**

fields involved: Regional Nodes Examined
Regional Nodes Positive

This edit fails if there is a conflict between the codes in these two fields. Basically, the total number of nodes found to be positive cannot exceed the total number of nodes that were examined. The edit is quite complex, however, because the coding systems for the two fields do not correspond as much as one might expect.

Listed below are all possible code combinations between the two fields. They are listed numerically by the code in Regional Nodes Examined, followed by the code(s) for Regional Nodes Positive that the edit will accept in that situation.

If Regional Nodes Examined is **00** (no nodes removed), then Regional Nodes Positive can only be **98** (no nodes removed).

If Regional Nodes Examined is **01 - 89** (a specific number of nodes were removed), then Regional Nodes Positive may be

00 - 89 (that specific number of nodes were positive) or
97 (there were positive nodes, but the exact number is unknown) or
99 (nodes were examined, but it's unknown if any were positive).

If both fields contain specific numbers of nodes, then Regional Nodes Examined must be ≥ Regional Nodes Positive.

If Regional Nodes Examined = **90** (ninety or more nodes were removed), then Regional Nodes Examined may be

00 - 95 (that specific number of nodes were positive) or
96 (ninety-six or more nodes were positive) or
97 (there were positive nodes, but the exact number is unknown) or
99 (nodes were examined, but it's unknown if any were positive).

That is, Regional Nodes Positive may be any code except **98** (no nodes were removed).

If Regional Nodes Examined is **95** (node aspiration), then Regional Nodes Positive may be

00 (all nodes examined were negative) or
97 (there were positive nodes, but the exact number is unknown) or
99 (nodes were examined, but it's unknown if any were positive).

If Regional Nodes Examined is coded

96 (nodes were sampled, exact number unknown) or
97 (nodes were dissected, exact number unknown) or
98 (nodes were removed surgically, sampling/dissection not specified, exact number unknown),

then Regional Nodes Positive may be any code except **98** (no nodes were removed).

If Regional Nodes Examined is **99** (not applicable, complete unknown), then Regional Nodes Positive can only be **99** also.

Given the limitations of the codes, this is as specific as the edit can get in looking for conflict between the two fields.

Note that the edit performs no comparisons against the fields RX Summ--Reg LN Removed and RX Hosp--Reg LN Removed because the values in the surgical fields are not expected to always agree with the staging node fields. The rules for coding the two sets of fields are quite different.

87. **Regional Nodes Examined (COC)**

field involved: Regional Nodes Examined (2 digits long)

This is a simple validity check.

Valid codes are **00** - **90** or **95** - **99** (any 2 digits but **91** - **94**).

The field cannot be empty.

---

88. **Regional Nodes Positive (COC)**

field involved: Regional Nodes Positive (2 digits long)

This is a simple validity check.

Valid codes are **00** - **99** (any 2 digits).

The field cannot be empty.

---

89. **RML Lung, Laterality (NAACCR)**

fields involved: Laterality
Primary Site

The left lung has no middle lobe (C34.2). This edit checks that C34.2 is not coded with a left Laterality.

If Primary Site = **C342** then Laterality <> **2**.

Although only the right lung has a middle lobe, *any* paired Laterality other than the left code is permitted by this edit. The edit will allow a cancer to begin in the middle lobe of a lung whose Laterality is not known (**3**, **4**), or when the Laterality is completely unknown (**9**). We would expect that if you know a cancer originated in a middle lobe, then you must assume that the Primary Site must be the right lung!

---

90. **RX Date--BRM (NAACCR)**

field involved: RX Date--BRM (8 digits long)

This is a treatment date validity check. All validity checks on treatment dates collected by the MCR behave in this way.

Error messages are "######## is an invalid date", "invalid as to year", "invalid as to month", "invalid as to day"*, "missing the year", "missing the month" and "missing the day". The particular message you may see depends on the type of error found by the edit.

If the year is coded **0000**, then the entire date must be filled with 8 zeroes. If the year alone is **0000** (with a valid month and day filled in), you will get the "missing the year" error message. A month or day code alone of **00** (with a valid year) generates the "missing the month" or "missing the day" message.

The field cannot be empty. (The COC version of this edit allows it to be empty.)

* Actually, you will see "invalid as *today*" because of a typo in the error message.

---

91. **RX Date--Chemo (NAACCR)**

field involved: RX Date--Chemo (8 digits long)

This is a treatment date validity check. See the description of Edit #90 on page E-76. It does the same thing using a different treatment date field.

---

92. **RX Date—DX/Stg/Pall Proc (NAACCR)**

field involved: RX Date—DX/Stg/Pall Proc (8 digits long)

This is a treatment date validity check. See the description of Edit #90 on page E-76. It does the same thing using a different treatment date field.

---

93. **RX Date--Hormone (NAACCR)**

field involved: RX Date--Hormone (8 digits long)

This is a treatment date validity check. See the description of Edit #90 on page E-76. It does the same thing using a different treatment date field.

---

94. **RX Date--Other (NAACCR)**

field involved: RX Date--Other (8 digits long)

This is a treatment date validity check. See the description of Edit #90 on page E-76. It does the same thing using a different treatment date field.

---

95. **RX Date--Radiation (NAACCR)**

field involved: RX Date--Radiation

This is a treatment date validity check. See the description of Edit #90 on page E-76. It does the same thing using a different treatment date field.

---

96. **RX Date--Surgery (NAACCR)**

field involved: RX Date--Surgery (8 digits long)

This is a treatment date validity check. See the description of Edit #90 on page E-76. It does the same thing using a different date treatment field.

---

97. **RX Date--Surgery, RX Text--Surgery (NAA/MCR-CIMS)**

fields involved: Class of Case
RX Date--Surgery
RX Text--Surgery

This edit checks that the surgery narrative has been filled in when surgery has been done. For simplicity, the edit uses just the surgery date field to determine if surgery has been done. This edit runs only in our Scan Edit Set.

If the surgery date is zero-filled (cancer-directed surgery was not done) or is 9-filled (completely unknown date), the edit passes without checking to see if there is any surgery narrative.

If the date is anything but **00000000** or **99999999**, the narrative cannot be empty.

Because the MCR does not require narratives for most non-analytic cases, the edit skips whenever Class of Case = **3**, **4**, **6** or **9**. It also skips if the surgery start date is empty.

Note that this narrative field should also contain text describing any non cancer-directed surgical procedures (diagnostic/staging/palliative surgical procedures). If no cancer-directed surgery was done, the edit does not check to see if diagnostic/staging/palliative procedures were done; the edit will allow the narrative field to be empty in such cases.

---

98. **RX Hosp--BRM (NAACCR)**

field involved: RX Hosp--BRM (1 digit long)

This is a simple validity check.

Valid codes are **0** - **9** (any single digit).

The field cannot be empty.

---

99. **RX Hosp--BRM, RX Summ--BRM (COC)**

fields involved: RX Hosp--BRM
RX Summ--BRM

This edit checks for basic agreement between the two fields. The edit is skipped for a case record if either field is empty.

If the hospital field indicates that some treatment was done (or was refused, or recommended, or may have been recommended/done), then the summary field cannot indicate that none was done. That is, if the hospital field is > **0** then the summary field must also be > **0**.

If the hospital field indicates that some kind of immunotherapy was done here (**1** - **6**), then the summary field cannot indicate that no immunotherapy at all was given (**0**) or that immunotherapy may have been recommended/done (**9**).

The edit does not go any further to test the compatibility of the two codes. For example, if the hospital code indicates combination immunotherapy (**6**) and the summary code indicates some single therapy only, the edit does not mind.

---

100. **RX Hosp--Chemo (NAACCR)**

field involved: RX Hosp--Chemo (1 digit long)

This is a simple validity check.

Valid codes are **0** - **3** or **9**.

The field cannot be empty.

101. **RX Hosp--Chemo, RX Summ--Chemo (COC)**

fields involved: RX Hosp--Chemo
RX Summ--Chemo

This edit checks for basic agreement between the two fields.

The edit is skipped for a case record if either field is empty.

If the hospital code indicates that some kind of chemo was done (or may have been recommended/done), then the summary code cannot indicate that none was done. That is, if the hospital code is > **0**, then the summary code must also be > **0**.

If the hospital code indicates that chemo was done, then the summary code cannot indicate that none was done or that some may have been recommended/done. That is, if the hospital code is **1** - **3**, then the summary code can't be **0** or **9**.

The edit does not look for any further consistency between the fields. For example, if the hospital indicates that multiple agents were given here (**3**) and the summary indicates that a single agent was given (**2**), the edit does not mind.

---

102. **RX Hosp--DX/Stg/Pall Proc (NAACCR)**

field involved: RX Hosp—DX/Stg/Pall Proc (2 digits long)

This is a simple validity check.

Valid codes are **00** - **07** or **09**.

The field cannot be empty.

---

103. **RX Hosp--DX/Stg/Pall, RX Summ--DX/Stg/Pall (NAACCR)**

fields involved: RX Hosp--DX/Stg/Pall Proc
RX Summ--DX/Stg/Pall Proc

This edit looks for basic agreement between the two fields. The edit skips for a case record if the hospital field is empty.

If the hospital field indicates that some kind of procedure(s) was done or may have been done, then the summary field cannot indicate that none was done. That is, if the hospital field is > **00** then the summary field must also be > **00**.

If the hospital field indicates that some procedure(s) was done (**01** - **07**), then the summary field cannot indicate that none was done (**00**) or that some may have been done (**09**).

The edit does not look for any greater consistency between the two fields. For example, if the hospital field indicates a biopsy plus a bypass and the summary field indicates just a biopsy, the edit does not mind.

---

104. **RX Hosp--Hormone (NAACCR)**

field involved: RX Hosp--Hormone (1 digit long)

This is a simple validity check.

Valid codes are **0** - **3** or **9**.

The field cannot be empty.

---

105. **RX Hosp--Hormone, RX Summ--Hormone (COC)**

fields involved: RX Hosp--Hormone
RX Summ--Hormone

This edit checks for basic agreement between the two fields.

The edit is skipped for a case record if either field is empty.

If the hospital code indicates that some treatment was done (or may have been recommended/done), then the summary code cannot indicate that none was done. That is, if the hospital code is > **0** then the summary code must also be > **0**.

If the hospital code indicates that some treatment was done here (**1 - 3**), then the summary code cannot indicate that none was done (**0**) or that some may have been recommended/done (**9**).

The edit does not check for further discrepancies between the two fields. If the hospital code indicates combination therapy (**3**) and the summary code indicates a single type of treatment (**1** or **2**), the edit does not mind.

---

106. **RX Hosp--Other (NAACCR)**

field involved: RX Hosp--Other (1 digit long)

This is a simple validity check.

Valid codes are **0 - 3** and **6 - 9**.

The field cannot be empty.

---

107. **RX Hosp--Other, RX Summ--Other (COC)**

fields involved: RX Hosp--Other
RX Summ--Other

This edit checks for basic agreement between the two fields.

The edit is skipped for a case record if either field is empty.

If the hospital field indicates that some therapy was given (or was refused, or recommended, or may have been recommended/done), then the summary field cannot indicate that none was done or that some may have been recommended/done. That is, if the hospital field is > **0** then the summary field must also be > **0**.

If the hospital field indicates that some therapy was given (**1 - 6**), then the summary field cannot indicate none given (**0**) or some may have been recommended/given (**9**).

---

108. **RX Hosp--Radiation (NAACCR)**

field involved: RX Hosp--Radiation (1 digit long)

This is a simple validity check.

Valid codes are **0 - 5** or **9**.

The field cannot be empty.

---

109. **RX Hosp--Radiation, RX Summ--Radiation (COC)**

fields involved: RX Hosp--Radiation
RX Summ--Radiation

This edit checks for basic agreement between the two fields.

The edit is skipped if either field is empty.

If the hospital field indicates that radiation was done or may have been done, then the summary field cannot indicate that none was done. That is, if the hospital field is > **0** then the summary field must also be > **0**.

If the hospital field indicates that radiation was done (**1 - 5**), then the summary field cannot indicate that none was done (**0**) or may have been done (**9**).

The edit does not check the combination of the two codes further. For example, if the hospital code indicates that multiple types of radiation were given (**4**), and the summary code indicates that only one type was given, the edit does not mind.

---

110. **RX Hosp--Reg LN Examined (NAACCR)**

field involved: RX Hosp--Reg LN Examined (2 digits long)

This is a simple validity check.

Valid codes are **00** - **90** or **95** - **99**.

The field cannot be empty.

Note that the *surgical* regional node fields are not checked against the *staging* node fields.

---

111. **RX Hosp--Scope LN Sur, RX Summ--Scope LN Sur(COC)**

fields involved: RX Hosp--Scope Reg LN Sur
RX Summ--Scope Reg LN Sur

This edit checks for basic agreement between the two fields. The edit skips for a case record if the hospital field is empty.

If the hospital code indicates that regional lymph node surgery was done or is **9**, then the summary code cannot indicate that no node surgery was done. That is, if the hospital code is > **0**, then the summary code must also be > **0**.

If the hospital code indicates that regional lymph node surgery was done (**1 - 8**), then the summary code cannot indicate that none was done (**0**) or that it's unknown (**9**).

The edit does not check the primary site and does not limit its code comparisons to only codes that are valid for that primary site. Note that the *surgical* regional node fields are not checked against the *staging* node fields by any edit.

---

112. **RX Hosp--Scope Reg LN Sur (NAACCR)**

field involved: RX Hosp--Scope Reg LN Sur (1 digit long)

This is a simple validity check.

Valid codes are **0** - **9** (any single digit).

The field cannot be empty.

Note that the *surgical* regional node fields are not checked against the *staging* node fields.

---

113. **RX Hosp--Scope Reg LN Sur, Primary Site (COC)**

fields involved: Primary Site
RX Hosp--Scope Reg LN Sur

The edit checks that the RX Hosp--Scope Reg LN Sur is a valid code for the primary site. Valid codes are in Appendix D of the MCR Manual and Appendix D of the ROADS Manual. The edit consults a look-up table of valid codes.

The edit is skipped for a case record if RX Hosp--Scope Reg LN Sur is empty.

Note that the *surgical* regional node fields are not checked against the *staging* node fields by any edit.

---

114. **RX Hosp--Scope Reg LN Sur,RX Hosp--Reg LN Ex (COC**

fields involved: RX Hosp--Reg LN Examined
RX Hosp--Scope Reg LN Sur
Year First Seen This CA

This edit looks for compatibility between RX Hosp--Scope Reg LN Sur and RX Hosp--Reg LN Examined.

The edit skips a case record whenever the Year First Seen This CA was before 1998.

If the Scope code indicates that no regional node surgery was done (**0**), then the Examined code must indicate that no nodes were surgically removed (**00**) or that nodes were only aspirated (**95**).

If the Scope code indicates that node surgery was done (**1 - 8**), then the Examined code must indicate that a definite number of nodes were removed (**01 - 90**) or that some indefinite number were surgically removed (**96 - 98**).

If the Scope code is completely unknown (**9**), then the Examined code can only be unknown (**99**).

Note that the *surgical* regional node fields are not checked against the *staging* node fields by any edit.

---

115. **RX Hosp--Surg Oth Reg, RX Summ--Surg Oth Reg (COC)**

fields involved: RX Hosp--Surg Oth Reg/Dis
RX Summ--Surg Oth Reg/Dis

This edit looks for basic agreement between the two fields.

The edit is skipped for a case record if the hospital field is empty.

If the hospital code indicates that such surgery was done or if it's unknown, then the summary code cannot indicate that no such surgery was done. That is, if RX Hosp--Surg Oth Reg/Dis is > **0**, then RX Summ--Surg Oth Reg/Dis must also be > **0**.

If the hospital code indicates that some such definite surgery was done (**1 - 8**), then the summary code cannot indicate that none was done (**0**) or that it's unknown (**9**).

The edit does not look for any more detailed consistency between the two codes.

---

116. **RX Hosp--Surg Oth Reg/Dis (NAACCR)**

field involved: RX Hosp--Surg Oth Reg/Dis (1 digit long)

This is a simple validity check.

Valid codes are **0** - **9** (any single digit).

The field cannot be empty.

---

117. **RX Hosp--Surg Oth Reg/Dis, Primary Site (COC)**

fields involved: Primary Site
RX Hosp--Surg Oth Reg/Dis

The edit checks that the RX Hosp--Surg Oth Reg/Dis is a valid code for the primary site. Valid codes are in Appendix D of the MCR Manual and Appendix D of the ROADS Manual. The edit consults a look-up table of valid codes.

The edit is skipped for a case record if the surgical field is empty.

---

118. **RX Hosp--Surg Pri Sit, RX Summ--Surg Pri Sit (COC)**

fields involved: RX Hosp--Surg Prim Site
RX Summ--Surg Prim Site

This edit checks for basic agreement between the two fields.

The edit is skipped for a case record if the hospital field is empty.

If the hospital code indicates that primary site surgery was done or if it's unknown (any code greater than **00**), then the summary code cannot indicate that none was done (**00**).

If the hospital code indicates that primary site surgery was done (**10** - **90**), then the summary code cannot indicate that none was done (**00**) or that it's unknown if it was done (**99**).

The edit does not do any more detailed checking. If the hospital code indicates that an extensive procedure was performed and the summary code indicates that only a small excision was done, the edit does not mind.

---

119. **RX Hosp--Surg Prim Site (NAACCR)**

field involved: RX Hosp--Surg Prim Site (2 digits long)

This is a simple validity check.

Valid codes are **00**, **10** - **90** and **99**.

The field cannot be empty.

---

120. **RX Hosp--Surg Prim Site, Primary Site (COC)**

fields involved: Primary Site
RX Hosp--Surg Prim Site

The edit checks that the RX Hosp--Surg Prim Site is a valid code for the primary site. Valid codes are in Appendix D of the MCR Manual and Appendix D of the ROADS Manual. The edit consults a look-up table of valid codes.

The edit is skipped for a case record if the surgical field is empty.

---

121. **RX Summ--BRM (COC)**

field involved: RX Summ--BRM (1 digit long)

This is a simple validity check.

Valid codes are **0 - 9** (any single digit).

The field cannot be empty.

---

122. **RX Summ--BRM, RX Date--BRM (COC)**

fields involved: RX Date--BRM (year only)
RX Summ--BRM

This edit checks for conflict between the two fields. It skips for a case record if the date field is empty.

If the treatment code indicates that no immunotherapy was given or was refused (**0** or **7**), then the date field must be filled with zeroes to indicate that no therapy was done.

If the treatment code indicates that immunotherapy was done (**1 - 6**), or if it's unknown whether it was recommended or done (**9**), then the date field cannot be filled with zeroes to indicate that it definitely wasn't done.

If the treatment code indicates that immunotherapy was recommended but it's unknown if it was done (**8**), the date must be filled with zeroes or nines.

If it's unknown whether or not the treatment was recommended/given (**9**), then the date must be filled with nines.

---

123. **RX Summ--BRM, RX Text--BRM (NAACCR/MCR-CIMS)**

fields involved: Class of Case
RX Summ--BRM
RX Text--BRM

This edit checks that the immunotherapy narrative has been filled in when Immunotherapy was given. It runs only in our Scan Edit Set.

If the summary code indicates that immunotherapy was given (**1 - 6**), then the narrative cannot be empty.

Because the MCR does not require narratives for most nonanalytic cases, the edit skips whenever Class of Case = **3**, **4**, **6** or **9**.

---

124. **RX Summ--Chemo (COC)**

field involved: RX Summ--Chemo (1 digit long)

This is a simple validity check.

Valid codes are **0** - **3** and **9**.

The field cannot be empty.

---

125. **RX Summ--Chemo, RX Date--Chemo (COC)**

fields involved: RX Date--Chemo (year only)
RX Summ--Chemo

This edit checks that there is not conflict between the chemotherapy start date and the summary code. It runs only in our Scan Edit Set.

If the summary code indicates chemotherapy was not done (**0**), then the year code must also indicate none done (**0000**).

If the summary code indicates that chemotherapy was done (**1** - **3**), then the year coded cannot indicate that it wasn't done (that is, the date must not be zero-filled).

If the summary code indicates that it's unknown if chemotherapy was recommended/done (**9**), then the date must be **9**-filled.

The edit skips for a case record if the date field is empty.

---

126. **RX Summ--Chemo, RX Text--Chemo (NAACCR/MCR-CIMS)**

fields involved: Class of Case
RX Summ--Chemo
RX Text--Chemo

This edit checks that the chemotherapy narrative has been filled in when chemotherapy was given.

If the summary code indicates that chemotherapy was given (**1** - **3**), then the narrative cannot be empty.

Because the MCR does not require narratives for most nonanalytic cases, the edit skips when Class of Case = **3**, **4**, **6** or **9**.

---

127. **RX Summ--DX/Stg/Pall Proc (COC)**

field involved: RX Summ--Non-CA Dir Surg (2 digits long)

This is a simple validity check.

Valid codes are **00** - **07** and **09**.

The field cannot be empty.

---

128. **RX Summ--DX/Stg/Pall, RX Date--DX/Stg/Pall (NAACCR**

fields involved: RX Date--DX/Stg/Pall Proc (year only)
RX Summ--DX/Stg/Pall Proc

This edit checks that there is not conflict between the date field and summary code. It skips if the date field is empty.

If the summary code indicates that no diagnostic/staging/palliative procedure was done (**00**), then the year coded must also indicate that none was done (**0000**).

If the summary code indicates that a procedure(s) was done (**01 - 07**), then the year coded cannot indicate that it wasn't done (that is, the date must not be zero-filled).

If the summary code indicates that it's unknown if a procedure was done (**09**), then the date must be **9**-filled.

---

129. **RX Summ--Hormone (COC)**

field involved: RX Summ--Hormone (1 digit long)

This is a simple validity check.

Valid codes are **0 - 3** and **9**.

The field cannot be empty.

---

130. **RX Summ--Hormone, RX Date--Hormone (COC)**

fields involved: RX Date—Hormone (year only)
RX Summ--Hormone

This edit checks that there is not conflict between the hormone therapy start date and the summary code. It skips for a case record if the date field is empty. It runs only in our Scan Edit Set.

If the summary code indicates that hormone therapy was not done (**0**), then the year coded must also indicate that none was done (**0000**).

If the summary code indicates that hormone therapy was done (**1 - 3**), then the year coded cannot indicate that it wasn't done (that is, the date must not be zero-filled).

If the summary code indicates that it's unknown if hormone therapy was recommended/done (**9**), then the date must be **9**-filled.

---

131. **RX Summ--Hormone, RX Text--Hormone (NAAC/MCR-CIMS)**

fields involved: Class of Case
RX Summ--Hormone
RX Text--Hormone

This edit checks that the hormone therapy narrative has been filled in when such therapy was given.
If the summary code indicates that hormone therapy was given (**1 - 3**), then the narrative cannot be empty.
Because the MCR does not require narratives for most nonanalytic cases, the edit skips when Class of Case = **3**, **4**, **6** or **9**.

---

132. **RX Summ--Other (COC)**

field involved: RX Summ--Other (1 digit long)

This is a simple validity check.

Valid codes are **0** - **3** and **6** - **9**.

The field cannot be empty.

---

133. **RX Summ--Other, RX Date--Other (COC)**

fields involved: RX Date--Other (year only)
RX Summ--Other

This edit checks that there is not conflict between the "other" cancer-directed therapy start date and the summary code. It skips for a case record if the date field is empty.

If the summary code indicates that other cancer-directed therapy was not done (**0**) or was not done because it was refused (**7**), then the year coded must also indicate that none was done (**0000**).

If the summary code indicates that other cancer-directed therapy was done (**1** - **3** or **6**), then the year coded cannot indicate that it wasn't done (that is, the date must not be zero-filled).

If the summary code indicates that other cancer-directed therapy was recommended but it's unknown whether it was ever done (**8**), then the year coded may be zero-filled or **9**-filled.

If the summary code indicates that it's unknown if other cancer-directed therapy was recommended/done (**9**), then the date must be **9**-filled.

---

134. **RX Summ--Other, RX Text--Other (NAA/MCR-CIMS)**

fields involved: Class of Case
RX Summ--Other
RX Text--Other

This edit checks that the other cancer-directed therapy narrative has been filled in when such therapy was given. It runs only in our Scan Edit Set.

If the summary code indicates that therapy was given (**1** – **3** or **6**), then the narrative cannot be empty.

Because the MCR does not require narratives for most nonanalytic cases, the edit skips when Class of Case = **3**, **4**, **6** or **9**.

---

135. **RX Summ--Radiation (COC)**

field involved: RX Summ--Radiation (1 digit long)

This is a simple validity check.

Valid codes are **0** - **5** and **9**.

The field cannot be empty.

---

136. **RX Summ--Radiation, RX Date--Radiation (COC)**

fields involved: RX Date—Radiation (year only)
RX Summ--Radiation

This edit checks that there is not conflict between the radiation therapy start date and the summary code. The edit skips if the date field is empty.

If the summary code indicates that radiation was not done (**0**), then the year code must also indicate none was done (**0000**).

If the summary code indicates that radiation was done (**1 - 5**), then the year coded cannot indicate that it wasn't done (that is, the date must not be zero-filled).

If the summary code indicates that it's unknown if radiation was recommended/done (**9**), then the date must be **9**-filled.

---

137. **RX Summ--Reconstruct 1st (NAACCR)**

field involved: RX Summ--Reconstruct 1st (1 digit long)

This is a simple validity check.

Valid codes are **0 - 9** (any single digit).

The field cannot be empty.

---

138. **RX Summ--Reconstruct 1st, Primary Site (COC)**

fields involved: Primary Site
RX Summ--Reconstruct 1st

This edit checks that the first-course therapy reconstruction code is valid for the primary site. Valid codes are in Appendix D of the MCR Manual and Appendix D of the ROADS Manual. The edit consults a look-up table of valid codes.

The edit skips for a case record if the reconstruction code is empty.

---

139. **RX Summ--Reg LN Examined (COC)**

field involved: RX Summ--Reg LN Examined (2 digits long)

This is a simple validity check.

Valid codes are **00 - 90** and **95 - 99**.

The field cannot be empty.

---

140. **RX Summ--Scope Reg LN Sur (COC)**

field involved: RX Summ--Scope Reg LN Sur (1 digit long)

This is a simple validity check.

Valid codes are **0 - 9** (any single digit).

The field cannot be empty.

141A. **RX Summ--Scope Reg LN Sur, Primary Site (COC)**

fields involved: Histology (92-00) ICD-O-2
Primary Site
RX Summ--Scope Reg LN Sur
Year First Seen This CA

This edit checks that the summary regional node surgery code is valid for the diagnosis coded. Valid codes are in Appendix D of the MCR Manual and Appendix D of the ROADS. The edit consults a look-up table of valid codes.

If Year First Seen for This Cancer > **1999**, then the regional node surgery code can only be **9** for leukemias (**9800-9941**), nodal lymphomas (**C77_** with **9590-9698**, **9702-9717**), brain primaries (**C700, C71_**), and unknown primaries (**C809**).

The edit skips for a case record if the ICD-O-2 histology code is empty.

141B. **RX Summ--Scope Reg LN Sur, Primary Site, ICDO3(COC)**

fields involved: Histologic Type ICD-O-3
Primary Site
RX Summ--Scope Reg LN Sur
Year First Seen This CA

This is the ICD-O-3 version of the preceding edit. It behaves just like the preceding edit, but the leukemias are defined by code range **9800 - 9989** and the nodal lymphomas are defined by **9590 - 9699**, **9702 - 9729**.

The edit skips if the ICD-O-3 histology code is empty.

---

142. **RX Summ--Scope Reg LN Sur,RX Summ--Reg LN Ex (NPCR**

fields involved: Date of Diagnosis (year only)
RX Summ--Reg LN Examined
RX Summ--Scope Reg LN Sur

This edit looks for compatibility between the summary fields for scope of node surgery and number of nodes removed.

This edit is skipped whenever the case record's year of diagnosis is less than **1998**.

If the summary "scope" code indicates that no regional node surgery was done (**0**), then the summary number of nodes removed must indicate that none were removed surgically (**00**) or that some were aspirated only (**95**).

If the summary "scope" code indicates that regional node surgery was done (**1 - 8**), then the summary number of nodes must be a specific number surgically removed (**01 - 90**) or an unknown number surgically removed (**96 - 98**).

If the summary "scope" code indicates that it's unknown if node surgery was done (**9**), then the unknown code must also be coded for the summary number of nodes removed (**99**).

---

143. **RX Summ--Surg Oth Reg/Dis (COC)**

field involved: RX Summ--Surg Oth Reg/Dis (1 digit long)

This is a simple validity check.

Valid codes are **0 - 9** (any single digit).

The field cannot be empty.

144. **RX Summ--Surg Oth Reg/Dis, Primary Site (COC)**

fields involved: Primary Site
RX Summ--Surg Oth Reg/Dis

This edit checks that the RX Summ--Surg Oth Reg/Dis code is a valid code for the primary site coded. Valid codes are in Appendix D of the MCR Manual and Appendix D of the ROADS Manual. The edit consults a look-up table of codes.

---

145. **RX Summ--Surg Prim Site (COC)**

field involved: RX Summ--Surg Prim Site (2 digits long)

This is a simple validity check.

Valid codes are **00**, **10** - **90** and **99**.

The field cannot be empty.

---

146. **RX Summ--Surg Prim Site, Diag Conf (SEER IF76)**

fields involved: Diagnostic Confirmation
RX Summ--Surg Prim Site

This edit questions a case record whenever primary site surgery was done but the diagnosis was not microscopically confirmed. The edit asks for review of a case when it sees this combination of codes:
RX Summ--Surg Prim Site = **10**-**90** and Diagnostic Confirmation <> **1**, **2**, or **4**

This edit has an over-ride ("Surg/DxConf").

Note that this edit used to check the diagnostic confirmation code against *all* of the cancer-directed summary surgery fields (in the Version 6 edits); now it is limited to just the primary site surgery.

---

147. **RX Summ--Surg Prim Site, Primary Site (COC)**

fields involved: Primary Site
RX Summ--Surg Prim Site

This edit checks that the summary primary site surgery code is valid for the primary site. Valid codes are in Appendix D of the MCR Manual and Appendix D of the ROADS Manual. The edit consults a look-up table of valid codes.

---

148. **RX Summ--Surg/Rad Seq (SEER RADSEQ)**

field involved: RX Summ--Surg/Rad Seq (1 digit long)

This is a simple validity check.

Valid codes are **0**, **2** - **6** and **9**.

The field cannot be empty.

---

149. **Sequence Number--Hospital (COC)**

field involved: Sequence Number--Hospital (2 characters long)

This is a simple validity check.

Valid codes are **00** - **25**, **99**, and any doubled upper-case letter (**AA**, **BB**, **CC**, **DD**, ... , **ZZ**). The doubled letter codes used by the edit are kept in a look-up table.

Lower case letters are not valid. A combination of number and letter is not valid. Any two letters which are not identical are not valid.

Note that when a doubled letter code is used in a case record, there is no edit that checks to see if the Behavior is coded as benign or uncertain. Likewise, if the Sequence Number is numeric, there is no check that the Behavior is coded as *in situ* or malignant.

The field cannot be empty.

---

150. **Sex (SEER SEX)**

field involved: Sex (1 digit long)

This is a simple validity check.

Valid codes are **1** - **4** and **9**.

The field cannot be empty.

---

151. **Sex, Primary Site (SEER IF17)**

fields involved: Primary Site
Sex

This edit checks that primary site codes considered to be "single-sex" are not combined with the opposite sex code.

The edit is skipped for a case record if either field has failed its validity check.

The edit fails when the sex is coded male (**1**) for primary site codes **C510** - **C589** (vulva; vagina; cervix uteri; corpus uteri; uterus, NOS; ovary; other and unspecified female genital organs; placenta).

The edit fails when the sex is coded female (**2**) for primary site codes **C600** - **C639** (penis; prostate gland; testis; other and unspecified male genital organs).

Note that the edit accepts any sex *except* male for the female-only sites, and any sex *except* female is OK for the male-only sites. That is, if the sex is coded as unknown (**9**) and the site is prostate or cervix, the edit does not mind.

The other sex codes (**3**, **4**) are also accepted with any site.

---

152. **Social Security Number (NAACCR)**

field involved: Social Security Number (9 digits long)

This is mainly a character check. It also considers one code invalid.

The field can only contain nine numbers. Any other type of character will fail. Fewer than nine numbers will fail.

A zero-filled Social Security number is not valid.

Any other nine numbers, even something suspiciously invalid-looking like **555555555** or **000000001**, will pass the edit.

The field cannot be empty.

---

153. **Spanish/Hispanic Origin (SEER SPANORIG)**

field involved: Spanish/Hispanic Origin (1 digit long)

This is a simple validity check.

Valid codes are **0** - **7** and **9**.

The field cannot be empty.

154A. **Summary Stage (NAACCR)**

field involved: SEER Summary Stage 1977 (1 digit long)

This is a simple validity check.

Valid codes are **0** - **5**, **7** and **9**. The field may be empty.

The edit will not accept a code of **6** for a stage of non-localized, NOS.

154B. **Summary Stage 2000 (NAACCR)**

field involved: SEER Summary Stage 2000 (1 digit long)

This is a simple validity check.

Valid codes are **0** - **5**, **7** and **9**. The field may be empty.

155A. **Summary Stage 2000, Date of Diagnosis (NAACCR)**

fields involved: Date of Diagnosis (year only)
Summary Stage 2000

This edit checks that Summary Stage 2000 is filled for diagnoses made in 2001 and thereafter.

If the year of diagnosis > **2000** (but not **9999**) and Summary Stage 2000 is empty, the edit fails. If the year of diagnosis is unknown (**9999**), the edit skips.

156A. **Summary Stage 2000, Regional Nodes Pos (NAACCR)**

fields involved: Regional Nodes Positive
Summary Stage 2000

This edit looks for basic compatibility between the positive node status and the Summary Stage 2000 coded. It skips any case record in which the Summary Stage 2000 is regional, NOS (**5**), distant (**7**) or unknown/unstageable (**9**).

The edit questions the following combinations of Summary Stage 2000 and Regional Nodes Positive:

Summary Stage *in situ* (**0**), localized (**1**), or regional by direct extension only (**2**) and at least one Regional Node Positive **01 - 97**;

Summary Stage regional to nodes only (**3**) or regional by direct extension plus regional nodes (**4**) and no Regional Nodes Positive (**00**) or it's unknown if any nodes examined were positive (**99**)*.

* (The combination of Summary Stage **3** or **4** and Regional Nodes Positive **99** produces a warning instead of an error.)

This NAACCR edit includes the following advice for the central registry:

"Most of the time, a discrepancy between SEER Summary Stage and Regional Nodes Positive will indicate a coding error in one of the two data items. Check the coding of each field carefully and correct any errors. Occasionally, however, there may be a legitimate discrepancy, most likely due to differences in the time period rules used to code the two items. ...SEER rules for collection of Regional Nodes Positive included a 2-month time period rule until 1998 when a 4-month rules was implemented. ROADS instructions for Regional Nodes Positive specify to record lymph nodes removed as part of the first course of therapy. Registries may differ in which rules were used, and when they were used. Ascertain the time period rules used by the registry a the time the case was collected, and verify that the appropriate time period rules were used to code the data items involved. If the discrepancy remains, set the over-ride flag ... to indicate that the case is correct as coded."

This edit skips for a case record if either field is empty.

This edit has an over-ride ("SS/Nodes Pos").

---

157. **Summary Stage 2000, Site, Hist, Class (NAACCR)**

fields involved: Class of Case
Histologic Type ICD-O-3
Primary Site
SEER Summary Stage 2000

Not all of the general Summary Stage codes (0-5,7,9) are applicable to all sites and histologies. This edit carefully checks that the Summary Stage 2000 field contains a code that is valid for the diagnosis coded.

The edit allows any Summary Stage 2000 code (**0 - 5**, **7**, **9**) for any site and histology, with the following exceptions:

ICD-O-3 histologies **8800-9055**, **9110-9136**, **9141-9508**, **9520-9582** cannot be *in situ* (stage **0**); codes **1-5**, **7**, **9** are OK;

the following staging schemes cannot have an *in situ* stage (**0**); codes **1 - 5**, **7**, **9** are OK:

- heart and mediastinum (**C380 - C383**, **C388**)
- pleura (**C384**)
- other and ill-defined respiratory sites and intrathoracic organs (**C390 - C399**)
- bones, joints and articular cartilage (**C400 - C419**)
- mycosis fungoides and Sezary syndrome of skin, vulva, penis, scrotum (**C440-C449**, **C510-C519**, **C600-C601**, **C608-C609**, **C632**, **9700-9701**)
- peripheral nerves and autonomic nervous system; connective, subcutaneous, and other soft tissues (**C470-C479**, **C490 - C499**)
- retroperitoneum and peritoneum (**C480 - C488**)
- retinoblastomas (**C692**, **C699**, **9510 - 9514**);

the following staging schemes cannot be *in situ* (**0**), regional by direct extension (**2**) or have regional node involvement (**3**, **4**); codes **1**, **5**, **7**, **9** are OK:
brain and cerebral meninges (**C700**, **C710 - C719**)
other parts of central nervous system (**C701**, **C709**, **C720 - C729**);

inflammatory carcinomas of the breast (**C500 - C509**, **8530**) are at least regional by direct extension, so they cannot be *in situ* (**0**), localized (**1**), regional to nodes only (**3**) or regional NOS (**5**); codes **2**, **4**, **7**, **9** are OK;

the staging scheme for pituitary gland, craniopharyngeal duct and pineal gland (**C751 - C753**) cannot have regional node involvement (**3**, **4**); codes **0 - 2**, **5**, **7**, **9** are OK

Kaposi sarcoma (**9140**, any site) cannot be *in situ* (**0**) or regional NOS (**5**); codes **1 - 4**, **7**, **9** are OK;

Hodgkin and non-Hodgkin lymphomas except mycosis fungoides and Sezary syndrome (**9590-9699**, **9702-9729**, any site) cannot be *in situ* (**0**) or a specific regional stage (**2-4**); they can only be localized (**1**), regional NOS (**5**), distant (**7**) or unstaged (**9**);
further, if multiple node regions were involved for a nodal lymphoma (**C778**), the disease cannot be localized (**1**) -- only codes **5**, **7**, **9** are OK;

plasmacytoma NOS (**9731**), extramedullary plasmacytoma (**9734**), malignant histiocytosis (**9750**), Langerhans cell histiocytosis NOS (**9751**) and unifocal Langerhans cell histiocytosis (**9752**) (any site) can only be localized (**1**) or distant (**7**);

all other hemaopoietic and myeloproliferative diseases except those above (**9732**, **9733**, **9740-9742**, **9753-9989**) (any site) can only be distant (**7**);

the staging scheme for other and ill defined sites and unknown primary site (**C760-C768**, **C809**, **C420-C424**, **C770-C779**, all histologies except **9140**, **9590-9699**, **9702-9729**, **9731-9989**) can only be staged **9**.

For any death certficate-only case (Class **8**, entered at the MCR only), the Summary Stage 2000 must be coded **9**. This applies to *all* sites and histologies.

The edit skips for a case record if any of the fields involved is empty.

This edit has NO over-ride. Check the *SEER Summary Staging Manual 2000* carefully to see which codes are valid for each staging scheme.

---

158. **Summary Stage 2000, Site, Hist, Rpt Srce (NAACCR)**

fields involved: Histologic Type ICD-O-3
Primary Site
SEER Summary Stage 2000
Type of Reporting Source

This edit does exactly what the preceding edit does, but it uses Type of Reporting Source rather than Class of Case to identify cases that were only "diagnosed" on a death certificate. Everything else is the same.

For any death certificate-only case (Type of Reporting Source=**7**, entered at the MCR only), the Summary Stage 2000 must be coded **9**. There are no exceptions.

The edit skips for a case record if any of the fields involved is empty.

159A. **Summary Stage 2000, TNM M (NAACCR)**

fields involved: SEER Summary Stage 2000
TNM Clin M
TNM Path M

This edit checks for basic compatibility between the Summary Stage 2000 code and the AJCC M elements.

The Summary Stage 2000 is checked against only one of the M elements. The pathologic M is used unless it is empty, **X_** or **88**; if the pM is empty, **X_** or **88**, and the clinical M is *not* empty/**X_**/**88**, then the cM is checked against the Summary Stage 2000. After checking for **88**s and choosing whether pM or cM is going to be used by the edit, only the first (leftmost) character of the 2-character M element is used.

The edit questions* these code combinations:

a Summary Stage 2000 that's anything but distant (**0 - 5**, **9**) and M=**1** (distant disease);

a Summary Stage 2000 that's distant (**7**) and M=**0** (no distant disease).

* (Summary Stage codes **0**, **1**, **3**, **9** produce an outright error with M=**1**; codes **2**, **4**, **5** produce a warning with M=**1**; Summary Stage **7** with M=**0** produces a warning.)

This NAACCR edit includes the following advice for the central registry:

"Most of the time, a discrepancy between SEER Summary Stage and the M code in TNM will indicate a coding error in one of the data items. Check the coding of each field carefully and correct any errors. Occasionally, however, there may be a legitimate discrepancy, most likely due to differences in the time period rules used to code the two items. .... AJCC rules for TNM often stipulate specific test results to be included in coding for clincal and patholgical staging separately, and relate time periods of coding to the initiation of therapy. Rules are provided for each primary site. Registries may differ in which rules were used, and when they were used. Ascertain the time period rules used by the registry a the time the case was collected, and verify that the appropriate time period rules were used to code the data items involved. If the discrepancy remains, set the over-ride flag ... to indicate that the case is correct as coded."

The edit skips any case record where the Summary Stage 2000 is empty or both of the M elements are empty; it also skips when both M elements are **88** (not stageable in the *AJCC Cancer Staging Manual, Fifth Edition*).

This edit has an over-ride ("SS/TNM-M").

160A. **Summary Stage 2000, TNM N (NAACCR)**

fields involved: SEER Summary Stage 2000
TNM Clin N
TNM Path N

This edit checks for basic compatibility between the Summary Stage 2000 code and the AJCC N elements.

The Summary Stage 2000 is checked against only one of the N elements. The pathologic N is used unless it is empty, **X_** or **88**; if the pN is empty, **X_** or **88**, and the clinical N is *not* empty/**X_**/**88**, then the cN is checked against the Summary Stage 2000. After checking for **88**s and choosing whether pN or cN is going to be used by the edit, only the first (leftmost) character of the 2-character N element is used.

The edit questions these code combinations:

a Summary Stage 2000 that indicates no regional node involvment (**0 - 2**) and N=**1 - 3** (regional node involvement);

a Summary Stage 2000 that indicates regional node involvment (**3**, **4**) and N=**0_** (no regional nodes involved).

This NAACCR edit includes the following advice for the central registry:

"Most of the time, a discrepancy between SEER Summary Stage and the M code in TNM will indicate a coding error in one of the data items. Check the coding of each field carefully and correct any errors. Occasionally, however, there may be a legitimate discrepancy, most likely due to differences in the time period rules used to code the two items. .... AJCC rules for TNM often stipulate specific test results to be included in coding for clincal and patholgical staging separately, and relate time periods of coding to the initiation of therapy. Rules are provided for each primary site. Registries may differ in which rules were used, and when they were used. Ascertain the time period rules used by the registry a the time the case was collected, and verify that the appropriate time period rules were used to code the data items involved. If the discrepancy remains, set the over-ride flag ... to indicate that the case is correct as coded."

The edit skips any case record in which the Summary Stage 2000 is coded **5**, **7** or **9** or is empty. It skips whenever both of the N elements are empty. It also skips when both N elements are **88** (not stageable in the *AJCC Cancer Staging Manual, Fifth Edition*).

This edit has an over-ride ("SS/TNM-N").

155B. **Summary Stage, Date of Diagnosis (NAACCR)**

fields involved: Date of Diagnosis (year only)
SEER Summary Stage 1977

This edit checks that the 1977 Summary Stage is filled in for appropriate diagnosis years (before 2001).

If the year of diagnosis<**2001**, SEER Summary Stage 1977 cannot be empty.

---

161. **Summary Stage, Histology (COC)**

fields involved: Date of Diagnosis (year only)
Histology (92-00) ICD-O-2
SEER Summary Stage 1977

This edit just checks that the 1977 Summary Stage is coded distant for Letterer-Siwe disease, multiple myeloma and leukemias (using ICD-O-2 codes).

The edit skips for any case record diagnosed in 2001 or thereafter.

If the ICD-O-2 histology=**9722**, **9732**, **9800 - 9941**, then SEER Summary Stage 1977 must be **7**.

156B. **Summary Stage, Regional Nodes Pos (NAACCR)**

fields involved: Regional Nodes Positive
SEER Summary Stage 1977

This is the Summary Stage 1977 version of Edit# 156A.

This edit looks for basic compatibility between the positive node status and the Summary Stage 1977 coded. It skips any case record in which the Summary Stage 1977 is regional, NOS (**5**), distant (**7**) or unknown/unstageable (**9**).

The edit questions the following combinations of Summary Stage 1977 and Regional Nodes Positive:

Summary Stage *in situ* (**0**), localized (**1**), or regional by direct extension only (**2**) and at least one Regional Node Positive **01 - 97**;

Summary Stage regional to nodes only (**3**) or regional by direct extension plus regional nodes (**4**) and no Regional Nodes Positive (**00**) or it's unknown if any nodes examined were positive (**99**)*.

* (The combination of Summary Stage **3** or **4** and Regional Nodes Positive **99** produces a warning instead of an error.)

This NAACCR edit includes the following advice for the central registry:

"Most of the time, a discrepancy between SEER Summary Stage and Regional Nodes Positive will indicate a coding error in one of the two data items. Check the coding of each field carefully and correct any errors. Occasionally, however, there may be a legitimate discrepancy, most likely due to differences in the time period rules used to code the two items. SEER Summary Stage 1977 has been variously coded using all information available within 2 months of diagnosis or within 4 months of diagnosis. SEER rules for collection of Regional Nodes Positive included a 2-month time period rule until 1998 when a 4-month rules was implemented. ROADS instructions for Regional Nodes Positive specify to record lymph nodes removed as part of the first course of therapy. Registries may differ in which rules were used, and when they were used. Ascertain the time period rules used by the registry a the time the case was collected, and verify that the appropriate time period rules were used to code the data items involved. If the discrepancy remains, set the over-ride flag ... to indicate that the case is correct as coded."

This edit skips for a case record if either field is empty.

This edit has an over-ride ("SS/Nodes Pos").

159B. **Summary Stage, TNM M (NAACCR)**

fields involved: SEER Summary Stage 1977
TNM Clin M
TNM Path M

This is the Summary Stage 1977 version of Edit# 159A. This edit checks for basic compatibility between the Summary Stage 1977 code and the AJCC M elements.

Summary Stage 1977 is checked against only one of the M elements. The pathologic M is used unless it is empty, **X_** or **88**; if the pM is empty, **X_** or **88**, and the clinical M is *not* empty/**X_**/**88**, then the cM is checked against the Summary Stage 1977. After checking for **88**s and choosing whether pM or cM is going to be used by the edit, only the first (leftmost) character of the 2-character M element is used.

The edit questions* these code combinations:

a Summary Stage 1977 that's anything but distant (**0 - 5**, **9**) and M=**1** (distant disease);

a Summary Stage 1977 that's distant (**7**) and M=**0** (no distant disease).

* (Summary Stage codes **0**, **1**, **3**, **9** produce an outright error with M=**1**; codes **2**, **4**, **5** produce a warning with M=**1**; Summary Stage **7** with M=**0** produces a warning.)

This NAACCR edit includes the following advice for the central registry:

"Most of the time, a discrepancy between SEER Summary Stage and the M code in TNM will indicate a coding error in one of the data items. Check the coding of each field carefully and correct any errors. Occasionally, however, there may be a legitimate discrepancy, most likely due to differences in the time period rules used to code the two items. SEER Summary Stage 1977 has been variously coded using all information available within 2 months of diagnosis or within 4 months of diagnosis. AJCC rules for TNM often stipulate specific test results to be included in coding for clincal and patholgical staging separately, and relate time periods of coding to the initiation of therapy. Rules are provided for each primary site. Registries may differ in which rules were used, and when they were used. Ascertain the time period rules used by the registry a the time the case was collected, and verify that the appropriate time period rules were used to code the data items involved. If the discrepancy remains, set the over-ride flag ... to indicate that the case is correct as coded."

The edit skips any case record where the Summary Stage 1977 is empty or both of the M elements are empty; it also skips when both M elements are **88** (not stageable in the *AJCC Cancer Staging Manual, Fifth Edition*).

This edit has an over-ride ("SS/TNM-M").

160B. **Summary Stage, TNM N (NAACCR)**

fields involved: SEER Summary Stage 1977
TNM Clin N
TNM Path N

This is the Summary Stage 1977 version of Edit# 160A. This edit checks for basic compatibility between the Summary Stage 1977 code and the AJCC N elements.

The Summary Stage 1977 is checked against only one of the N elements. The pathologic N is used unless it is empty, **X_** or **88**; if the pN is empty, **X_** or **88**, and the clinical N is *not* empty/**X_**/**88**, then the cN is checked against the Summary Stage 1977. After checking for **88**s and choosing whether pN or cN is going to be used by the edit, only the first (leftmost) character of the 2-character N element is used.

The edit questions these code combinations:

a Summary Stage 1977 that indicates no regional node involvment (**0 - 2**) and N=**1 - 3** (regional node involvement);

a Summary Stage 1977 that indicates regional node involvment (**3**, **4**) and N=**0_** (no regional nodes involved).

This NAACCR edit includes the following advice for the central registry:

"Most of the time, a discrepancy between SEER Summary Stage and the M code in TNM will indicate a coding error in one of the data items. Check the coding of each field carefully and correct any errors. Occasionally, however, there may be a legitimate discrepancy, most likely due to differences in the time period rules used to code the two items. SEER Summary Stage 1977 has been variously coded using all information available within 2 months of diagnosis or within 4 months of diagnosis. AJCC rules for TNM often stipulate specific test results to be included in coding for clincal and patholgical staging separately, and relate time periods of coding to the initiation of therapy. Rules are provided for each primary site. Registries may differ in which rules were used, and when they were used. Ascertain the time period rules used by the registry a the time the case was collected, and verify that the appropriate time period rules were used to code the data items involved. If the discrepancy remains, set the over-ride flag ... to indicate that the case is correct as coded."

The edit skips any case record in which the Summary Stage 1977 is coded **5**, **7** or **9** or is empty. It skips whenever both of the N elements are empty. It also skips when both N elements are **88** (not stageable in the *AJCC Cancer Staging Manual, Fifth Edition*).

This edit has an over-ride ("SS/TNM-N").

162. **Surgery, Rad, Surg/Rad Seq (COC)**

fields involved: RX Summ--Radiation
RX Summ--Scope Reg LN Sur
RX Summ--Surg Oth Reg/Dis
RX Summ--Surg Prim Site
RX Summ--Surg/Rad Seq

The edit checks for basic agreement among (cancer-directed) surgery, radiation and their sequencing field.

The edit is skipped for a case record if any of the fields is empty.

If the summary treatment codes indicate that both surgery and radiation were done, then the sequencing field must specify that both were done. That is, the edit wants these code combinations:

RX Summ Radiation=**1**-**5** and [RX Summ--Scope Reg LN Sur=**1**-**8**
or RX Summ--Surg Oth Reg/Dis=**1**-**8**
or RX Summ--Surg Prim Site=**10**-**90**]
and Rx Summ--Surg/Rad Seq=**2**-**6** or **9**

If the summary codes indicate that at least one of these treatment modalities was not done, then the sequencing field can only indicate that both were not done. That is, the edit wants these code combinations:

RX Summ Radiation=**0** or [RX Summ--Scope Reg LN Sur=**0**
and RX Summ--Surg Oth Reg/Dis=**0**
and RX Summ--Surg Prim Site=**00**]
and Rx Summ--Surg/Rad Seq=**0**

Note that unknown codes are missing from these checks. That is, if the summary radiation code is **9** or all of the (cancer-directed) surgery summaries are **9**/**99**, then the edit will not look at the sequencing field at all. (There is no code for the sequencing field that indicates it's unknown if both radiation and surgery were done.) Thus, the edit will pass this combination of codes:

RX Summ Radiation=**9** or [RX Summ--Scope Reg LN Sur=**9**
and RX Summ--Surg Oth Reg/Dis=**9**
and RX Summ--Surg Prim Site=**99**]
and Rx Summ--Surg/Rad Seq=**0**, **2**-**6**, **9**

Note that this edit does not look at any dates, so it is not checking that the sequencing field makes sense in terms of time. If the summary codes indicate that radiation was started *before* cancer-directed surgery while the treatment date fields show that radiation started *after* the surgery, the edit does not mind.

163. **Surgery, Reason No Surg (COC)**

fields involved: Reason for No Surgery
RX Summ--Scope Reg LN Sur
RX Summ--Surg Oth Reg/Dis
RX Summ--Surg Prim Site

This edit checks for agreement between the "Reason for No" field and the summary (cancer-directed) surgery fields.

The edit is skipped for a case record if any of these fields is empty.

If the summary codes indicate that surgery was not done, then the "Reason for No" code cannot indicate that it was done. That is, the edit wants this code combination:

[RX Summ--Scope Reg LN Sur = **0**
and RX Summ--Surg Oth Reg/Dis = **0**
and RX Summ--Surg Prim Site = **00**] and Reason for No Surgery <> **0**

If a summary code(s) indicates that some surgery was done, then the "Reason for No" code must also indicate that it was done. That is, the edit wants this code combination:

[RX Summ--Scope Reg LN Sur = **1**-**8**
or RX Summ--Surg Oth Reg/Dis = **1**-**8**
or RX Summ--Surg Prim Site = **10**-**90**] and Reason for No Surgery = **0**

Note that unknown codes are missing from these checks. If it's unknown whether any surgery was done, the "Reason for No" field is not checked and can contain any code. That is, the edit will pass this combination of codes:

[RX Summ--Scope Reg LN Sur = **9**
and RX Summ--Surg Oth Reg/Dis = **9**
and RX Summ--Surg Prim Site = **99**] and Reason for No Surgery = **0**-**2**, **6**-**9**

164A. **Surgery, RX Date--Surgery (COC)**

fields involved: Histology (92-00) ICD-O-2
Primary Site
RX Date--Surgery (year only)
RX Summ--Scope Reg LN Sur
RX Summ--Surg Oth Reg/Dis
RX Summ--Surg Prim Site

This edit checks that the year (cancer-directed) surgery started is not coded in conflict with the surgery summary codes. Keep in mind that the Scope of Regional Lymph Node Surgery is now coded **9** for leukemias (**9800 - 9941**), nodal lymphomas (**C770-C779**, **9590-9698**, **9702-9717**), brain primaries (**C700**, **C710 - C719**) and unknown primary site (**C809**); but that these diagnoses were not always limited to code **9** in the past.

If the summary codes indicate that no surgery was done, then the year must be zero-filled to indicate that none was done. That is, the edit wants this combination of codes:

[RX Summ--Scope Reg LN Sur = **0** (or **9** for leukemias, nodal lymphomas, brain primaries, unknown primary)
and RX Summ--Surg Oth Reg/Dis = **0**
and RX Summ--Surg Prim Site = **00**] and RX Date--Surgery = **00000000**

If the summary codes indicate surgery was done, then the year can't be zero-filled. The edits wants this code combination:

[RX Summ--Scope Reg LN Sur = **1-9** (or **1-8** for leukemias, nodal lymphomas, brain primary, unknown primary)
and RX Summ--Surg Oth Reg/Dis > **0**
and RX Summ--Surg Prim Site ≥ **10**] and RX Date--Surgery <> **00000000**

Note that if the Primary Site Surgery or Surgery of Other… summary codes indicate that it's unknown whether or not surgery was recommended/done (**99**, **9**), then the date does not have to be **9**-filled -- it can be any date except **00000000**.

The edit skips any case record in which any of the involved fields is empty.

164B. **Surgery, RX Date—Surgery, ICDO3 (COC)**

fields involved: Histologic Type ICD-O-3
Primary Site
RX Date--Surgery
RX Summ--Scope Reg LN Sur
RX Summ--Surg Oth Reg/Dis
RX Summ--Surg Prim Site

This is an ICD-O-3 version of the preceding edit. It works exactly like the preceding edit, but leukemias and nodal lymphomas are defined by the ICD-O-3 histology code ranges **9800 - 9989** and **9590 - 9699**, **9702 - 9729**.

---

165. **TNM Clin M (COC)**

field involved: TNM Clin M (2 characters long)

This is a simple validity check.

Valid codes are:

X_
0_
1_
1A
1B
1C
88

Letters entered cannot be lower case.

Note that, even if only a single character is being entered, your data system should be filling in the second character with a space (i.e., "blank filling" the field completely), at least when the case is exported for the MCR. For example, if your M field comes to us containing just an **X** without that second space being filled in, the field will fail the edit.

Note: The codes considered valid by the pathologic M edit are identical to these.

The field can be empty. (The validity check skips a case record if the clinical M is empty.)

166. **TNM Clin N (COC)**

field involved: TNM Clin N (2 characters long)

This is a simple validity check.

Valid codes are:

X_	**2_**	**3_**
0_	**2A**	**3A**
1_	**2B**	**3B**
1A	**2C**	**88**
1B		

Letters entered cannot be lower case.

Note that, even if only a single character is being entered, your data system should be filling in the second character with a space (i.e., "blank filling" the field completely), at least when the case is exported for the MCR. For example, if your N field comes to us containing just an "X" without that second space being filled in, the field will fail the edit.

Note: The codes considered valid by the pathologic N edit are identical to these.

The field can be empty. (The validity check skips any case record where the clinical N is empty.)

---

167. **TNM Clin Stage Group (COC)**

field involved TNM Clin Stage Group (2 characters long)

This is a simple validity check.

Valid codes are :

0_	**1_**	**2_**	**4_**
0A	**1A**	**2A**	**4A**
0S	**A1**	**2B**	**4B**
	A2	**2C**	**4C**
	1B	**3_**	**88**
	B1	**3A**	**99**
	B2	**3B**	**OC** (That first character is the *letter* "Oh" -- *not* the number zero.)
	1C	**3C**	
	1S		

Letters entered cannot be lower case.

Note that, even if only a single character is being entered, your data system should be filling in the second character with a space (i.e., "blank filling" the field completely), at least when the case is exported for the MCR. For example, if your Stage Group field comes to us containing just a zero without that second space being filled in, the field will fail the edit.

Note: The codes considered valid by the pathologic Stage Group edit are identical to these.

The description of the ROADS version of this edit appearing in the ROADS Edits Manual lists the code "IS" rather than **1S**. **1S** is the valid code.

The field can be empty. (The edit skips for any case record where the clinical Stage Group is empty.)

Note that the Stage Group field is not checked for consistency against the corresponding Clinical T, N and M fields for the diagnosis coded.

---

168. **TNM Clin Stage Group, TNM Path Stage Group (COC)**

fields involved: TNM Clin Stage Group
TNM Path Stage Group

This edit simply checks that if one Stage Group code indicates that the case is not stageable under the AJCC staging system (**88**), then the other code must also indicate this.

That is, if the clinical Stage Group = **88**, then the pathologic Stage Group must = **88**. If the pathologic Stage Group = **88**, then the clinical Stage Group must = **88**.

This is all that the edit checks.

---

169. **TNM Clin T (COC)**

field involved: TNM Clin T (2 characters long)

This is a simple validity check.

Valid codes are:

X_	**2_**
0_	**2A**
A_	**2B**
IS	**2C**
SU	**3_**
SD	**3A**
1M	**3B**
1_	**3C**
1A	**4_**
A1	**4A**
A2	**4B**
1B	**4C**
B1	**4D**
B2	**88**
1C	

Letters entered cannot be lower case.

Note that, even if only a single character is being entered, your data system should be filling in the second character with a space (i.e., "blank filling" the field completely), at least when the case is exported for the MCR. For example, if your T field comes to us containing just a **2** without that second space being filled in, the field will fail the edit.

Note: Codes considered valid by the pathologic T edit are identical to these. The field is not checked against any other field.

The field can be empty. (The edit skips a case record if the clinical T is empty.)

---

170. **TNM Edition Number (NAACCR)**

field involved: TNM Edition Number (1 digit long)

This is a simple validity check.

Valid codes are **0** - **5**, **8** and **9**.

The field cannot be empty.

Note that there is no edit to check if the appropriate Edition was used to stage the case, given its diagnosis year. We expect that this field records the Edition *actually* used to stage the case.

---

171. **TNM Path M (COC)**

field involved: TNM Path M (2 characters long)

This is a simple validity check.

Valid codes are:

X_
0_
1_
1A
1B
1C
88

Letters entered cannot be lower case.

Note that, even if only a single character is being entered, your data system should be filling in the second character with a space (i.e., "blank filling" the field completely), at least when the case is exported for the MCR. For example, if your M field comes to us containing just a **1** without that second space being filled in, the field will fail the edit.

Note: The codes considered valid by the clinical M edit are identical to these.

The field can be empty. (The edit skips any case record where the pathologic M is empty.)

---

172. **TNM Path N (COC)**

field involved: TNM Path N (2 characters long)

This is a simple validity check.

Valid codes are:

X_
0_
1_
1A
1B
2_
2A
2B
2C
3_
3A
3B
88

Letters entered cannot be lower case.

Note that, even if only a single character is being entered, your data system should be filling in the second character with a space (i.e., "blank filling" the field completely), at least when the case is exported for the MCR. For example, if your N field comes to us containing just a **3** without that second space being filled in, the field will fail the edit.

Note: The codes considered valid by the clinical N edit are identical to these.

The field can be empty. (The edit skips if the pathologic N is empty.)

---

173. **TNM Path Stage Group (COC)**

field involved: TNM Path Stage Group (2 characters long)

This is a simple validity check.

Valid codes are :

0_	**2_**	**4_**	
0A	**2A**	**4A**	
0S	**2B**	**4B**	
1_	**2C**	**4C**	
1A	**3_**	**88**	
A1	**3A**	**99**	
A2	**3B**	**OC**	(That first character is the *letter* "Oh" -- *not* the number zero.)
1B	**3C**		
B1			
B2			
1C			
1S			

Letters entered cannot be lower case.

Note that, even if only a single character is being entered, your data system should be filling in the second character with a space (i.e., "blank filling" the field completely), at least when the case is exported for the MCR. For example, if your Stage Group field comes to us containing just a "1" without that second space being filled in, the field will fail the edit.

Note: The codes considered valid by the clinical Stage Group edit are identical to these.

The description of the ROADS version of this edit appearing in the ROADS Edits Manual lists the code "IS" rather than **1S**. **1S** is the valid code.

The field can be empty. (The edit skips if the field is empty.)

Note that this field is not checked against the corresponding Pathologic T, N and M fields for the diagnosis coded.

---

174. **TNM Path T (COC)**

field involved: TNM Path T (2 characters long)

This is a simple validity check.

Valid codes are:

X_	**1A**	**2_**	**4_**
0_	**A1**	**2A**	**4A**
A_	**A2**	**2B**	**4B**
IS	**1B**	**2C**	**4C**
SU	**B1**	**3_**	**4D**
SD	**B2**	**3A**	**88**
1M	**1C**	**3B**	
1_		**3C**	

Letters entered cannot be lower case.

Note that, even if only a single character is being entered, your data system should be filling in the second character with a space (i.e., "blank filling" the field completely), at least when the case is exported for the MCR. For example, if your T field comes to us containing just a **X** without that second space being filled in, the field will fail the edit.

Note: The codes considered valid by the clinical T edit are identical to these. The field is not checked against any other.

The field can be empty. (The edit skips for a case record if the pathologic T is empty.)

175. **TNM-Emptiness Check (MCR-CIMS)**

fields involved: TNM Clin M
TNM Clin N
TNM Clin Stage Group
TNM Clin T
TNM Path M
TNM Path N
TNM Path Stage Group
TNM Path T

This is a simple blank check. None of the above fields may be empty for the MCR. Unknown or "not applicable" codes should be filled in when necessary.

If any of the fields is empty, the edit will complain with a long message. It will not indicate which field(s) are empty.

---

176. **Tobacco History (MCR-CIMS)**

field involved: Tobacco History (1 digit long)

This is a simple validity check.

Valid codes are **0** - **5** and **9**.

The field cannot be empty. The COC version of this edit allows the field to be empty because it is optional for the COC. The MCR must collect this field for all cases.

Note that this field is not checked against patient age. A 3-year old patient coded as a cigar-smoker would not fail any edit.

---

177. **Type of Report Srce(DC/AO), Date of Dx (SEER IF02)**

fields involved: Date of Diagnosis
Date of Last Contact
Type of Reporting Source

For cases first diagnosed at autopsy (or on death certificate*), this edit checks that the diagnosis date is the same as the last contact date (which should be the date of death). Remember that, for diagnoses made at autopsy, the diagnosis date should be set to the date of death, even if the autopsy was performed on a later date.

If Type of Reporting Source indicates autopsy (**6**) or death certificate (**7**), then Date of Diagnosis must be the same as Date of Last Contact.

The edit is skipped for a case record if any of the fields has failed its validity check.

Note that the Class of Case code is not being checked -- just the source of information about the case.

* Although true death certificate-only cases are not reported by hospitals to the MCR, if a code of **7** got into the Type of Reporting Source field for a case, this edit would be checking that case's dates of diagnosis and last contact for agreement.

---

178. **Type of Report Srce(DC/AO), Diag Conf (SEER IF05)**

fields involved: Diagnostic Confirmation
Type of Reporting Source

This edit checks that diagnoses made at autopsy were made visually or had a positive microscopic histologic finding. It also checks that it's unknown whether microscopic diagnostic confirmation was obtained for diagnoses first made on a death certificate*.

The edit is skipped for a case record if either field has failed its validity check.

If Type of Reporting Source indicates diagnosis at autopsy (**6**), then Diagnostic Confirmation must be **1** or **6**.

If Type of Reporting Source indicates first diagnosis on death certificate (**7**), then Diagnostic Confirmation must be **9**.

Note that the Class of Case code is not being checked -- just the source of information about the case.

* Although true death certificate-only cases are not reported to the MCR by hospitals, if a code of **7** got into the Type of Reporting Source field for a case, this edit would be checking that case's Diagnostic Confirmation code for a **9**.

---

179. **Type of Report Srce(DC/AO), Vit Stat (COC)**

fields involved: Type of Reporting Source
Vital Status

This edit checks that patients known to have been autopsied or who have a death certificate* are coded as being dead.

The edit is skipped for a case record if either field has failed its validity check.

If the Type of Reporting Source indicates that diagnosis was first made at autopsy (**6**) or on death certificate (**7**), then the Vital Status must indicate that the patient is dead (**0**).

Note that the Class of Case code is not being checked -- just the source of information about the case.

* Although true death certificate-only cases are not reported to the MCR by hospitals, if a code of **7** got into the Type of Reporting Source field for a case, this edit would be checking that case's Vital Status code for a **0**.

---

180. **Type of Reporting Source (SEER RPRTSRC)**

field involved: Type of Reporting Source (1 digit long)

This is a simple validity check.

Valid codes are **1** and **3 - 7**.

The field cannot be empty.

---

181. **Unknown Site, Laterality (NAACCR)**

fields involved: Laterality
Primary Site

This edit checks that Laterality is coded “not a paired site” when the Primary Site is unknown.

If Primary Site=**C809** then Laterality must = **0**.

---

182. **Unknown Site, Summary Stage (NAACCR)**

fields involved: Primary Site
SEER Summary Stage 1977

This edit checks that the Summary Stage 1977 is coded “unstageable” when the Primary Site is unknown

If Primary Site=**C809** then Summary Stage 1977 must = **9**.

The edit skips for a case record if the Summary Stage 1977 is empty.

---

183. **Verify ICDO2 to ICDO3 Conversion (NAACCR)**

fields involved: Behavior (92-00) ICD-O-2
Behavior Code ICD-O-3
Date of Diagnosis (year only)
Histologic Type ICD-O-3
Histology (92-00) ICD-O-2
ICDO3 Conversion Flag
Primary Site

This edit checks that the ICD-O-2 morphology code and ICD-O-3 morphology code are compatible for a case record. It only checks records in which the diagnosis was made before 2001, both ICD-O-2 and ICD-O-3 morphologies (behavior and histology) are filled in, and the ICD-O-3 Conversion Flag indicates that a manual review of the two sets of codes has not been performed (codes **0**, **1**, **2** or empty).

The edit skips if the year of diagnosis > **2000**. It skips if the ICD-O-2 behavior and histology are empty. It skips if the ICD-O-3 behavior and histology are empty. It skips if the ICD-O-3 Conversion Flag is coded **3** (manual review of the morphology codes was done) or **4** (this amounts to the same thing as a code **3**).

The edit uses a look-up table of valid ICD-O-2 codes and the corresponding ICD-O-3 code conversions (histologic type codes plus behavior codes). If the ICD-O-2 morphology coded in the case record is found in the table, then the ICD-O-3 morphology coded in the record is compared with the corresponding codes in the look-up table. When discrepancies between the case record and the look-up table are encountered, different warning messages are produced: "Morph--Type&Behav ICD-O-2 not found in conversion table" if the ICD-O-2 codes in the case are not considered valid; "Morph--Type&Behav ICD-O-3 not found in conversion table" if the ICD-O-3 codes in the case are not considered valid; and "ICD-O-2/ICD-O-3 behavior conflict" if the behavior codes do not match the valid conversions. (The behavior codes are actually compared first; if they conflict, then the edit stops without bothering to check if the histologic type codes conflict.)

The edit tries to take into consideration that the ICD-O "matrix" rule may have been applied (the rule that any valid behavior code may be assigned to a morphology to reflect the cancer's true behavior, even if the morphology code printed in the ICD-O manual does not specifically include that behavior code).

The Primary Site code is also involved in the conversion of some morphologies.

The look-up table used by this edit to check the code conversions is based on the ICD-O-2/ICD-O-3 conversion materials available on the SEER website (http://seer.cancer.gov/Admin/ConvProgs/). These are the same conversions used by the MCR on our own case records, except that we convert pilocytic astrocytomas (**9421**) to behavior /**3** rather than /1.

---

184. **Vital Status (COC)**

field involved: Vital Status (1 digit long)

This is a simple validity check.

Valid codes are **0** and **1**.

This is one of the rare coded fields which have no code for "unknown". Because this field records the patient's Vital Status as of the Date of Last Contact entered, it is expected that you must know a specific Vital Status.

The field cannot be empty.

---

185. **Year First Seen This CA (COC)**

field involved: Year First Seen This CA (4 digits long)

This is a simple date validity check.

Valid codes are any 4-digit number from **1944** to the current year.

There is no code for "unknown". It is expected that you must know the value for this field.

The field cannot be empty.

---

186. **Year First Seen This CA, Date of DX (NAACCR)**

fields involved: Date of Diagnosis (year only)
Year First Seen This CA

This edit checks that the patient was not first seen at your facility for this cancer before the diagnosis year.

The edit is skipped for a case record if the diagnosis year is coded as unknown (**9999**).

The edit will fail if Year First Seen This CA is < the year coded in Date of Diagnosis.

Note that this edit compares these two years only. Treatment years and last contact year are not involved in this edit.

Appendix F

U.S. Postal Service Standard Abbreviations

(mainly Street Types)

U.S. Postal Service Standard Abbreviations

Alley	Aly	Curve	Curv	Hill	Hl	Park	Park	Spring	Spg
Annex	Anx	Dale	Dl	Hills	Hls	Parkway	Pkwy	Springs	Spgs
Apartment	Apt	Dam	Dm	Hollow	Holw	Parkways	Pkwy	Spur	Spur
Arcade	Arc	Department	Dept	Inlet	Inlt	Pass	Pass	Spurs	Spur
Avenue	Ave	Divide	Dv	Island	Is	Passage	Psge	Square	Sq
Basement	Bsmt	Drive	Dr	Islands	Iss	Path	Path	Squares	Sqs
Bayoo	Byu	Drives	Drs	Isle	Isle	Penthouse	Ph	Station	Sta
Beach	Bch	Estate	Est	Junction	Jct	Pier	Pier	Stop	Stop
Bend	Bnd	Estates	Ests	Junctions	Jcts	Pike	Pike	Stravenue	Stra
Bluff	Blf	Expressway	Expy	Key	Ky	Pine	Pne	Stream	Strm
Bluffs	Blfs	Extension	Ext	Keys	Kys	Pines	Pnes	Street	St
Bottom	Btm	Extensions	Exts	Knoll	Knl	Place	Pl	Streets	Sts
Boulevard	Blvd	Fall	Fall	Knolls	Knls	Plain	Pln	Suite	Ste
Branch	Br	Falls	Fls	Lake	Lk	Plains	Plns	Summit	Smt
Bridge	Brg	Ferry	Fry	Lakes	Lks	Plaza	Plz	Terrace	Ter
Brook	Brk	Field	Fld	Land	Land	Point	Pt	Throughway	Trwy
Brooks	Brks	Fields	Flds	Landing	Lndg	Points	Pts	Trace	Trce
Building	Bldg	Flat	Flt	Lane	Ln	Port	Prt	Track	Trak
Burg	Bg	Flats	Flts	Light	Lgt	Ports	Prts	Trafficway	Trfy
Burgs	Bgs	Floor	Fl	Lights	Lgts	Prairie	Pr	Trail	Trl
Bypass	Byp	Ford	Frd	Lobby	Lbby	Radial	Radl	Trailer	Trlr
Camp	Cp	Fords	Frds	Lock	Lck	Ramp	Ramp	Tunnel	Tunl
Canyon	Cyn	Forest	Frst	Locks	Lcks	Ranch	Rnch	Turnpike	Tpke
Cape	Cpe	Forge	Frg	Lodge	Ldg	Rapid	Rpd	Underpass	Upas
Causeway	Cswy	Forges	Frgs	Loop	Loop	Rapids	Rpds	Union	Un
Center	Ctr	Fork	Frk	Lot	Lot	Rear	Rear	Unions	Uns
Centers	Ctrs	Forks	Frks	Lower	Lowr	Rest	Rst	Unit	Unit
Circle	Cir	Fort	Ft	Mall	Mall	Ridge	Rdg	Upper	Uppr
Circles	Cirs	Freeway	Fwy	Manor	Mnr	Ridges	Rdgs	Valley	Vly
Cliff	Clf	Front	Frnt	Manors	Mnrs	River	Riv	Valleys	Vlys
Cliffs	Clfs	Garden	Gdn	Meadow	Mdw	Road	Rd	Viaduct	Via
Club	Clb	Gardens	Gdns	Meadows	Mdws	Roads	Rds	View	Vw
Common	Cmn	Gateway	Gtwy	Mews	Mews	Room	Rm	Views	Vws
Corner	Cor	Glen	Gln	Mill	Ml	Route	Rte	Village	Vlg
Corners	Cors	Glens	Glns	Mills	Mls	Row	Row	Villages	Vlgs
Course	Crse	Green	Grn	Mission	Msn	Rue	Rue	Ville	Vl
Court	Ct	Greens	Grns	Motorway	Mtwy	Run	Run	Vista	Vis
Courts	Cts	Grove	Grv	Mount	Mt	Shoal	Shl	Walk	Walk
Cove	Cv	Groves	Grvs	Mountain	Mtn	Shoals	Shls	Walks	Walk
Coves	Cvs	Hangar	Hngr	Mountains	Mtns	Shore	Shr	Wall	Wall
Creek	Crk	Harbor	Hbr	Neck	Nck	Shores	Shrs	Way	Way
Crescent	Cres	Harbors	Hbrs	Office	Ofc	Side	Side	Ways	Ways
Crest	Crst	Haven	Hvn	Orchard	Orch	Skyway	Skwy	Well	Wl
Crossing	Xing	Heights	Hts	Oval	Oval	Slip	Slip	Wells	Wls
Crossroad	Xrd	Highway	Hwy	Overpass	Opas	Space	Spc		

source: *Official U.S. Postal Service Abbreviations* -- http://www.usps.gov.ncsc/lookups/usps_abbreviations.htm

Appendix G

Facility Codes for fields

"Institution Referred From"

and

"Institution Referred To"

This Appendix contains MCR codes and ACoS codes for facilities that report (or have reported) cancer cases to the MCR.

Also included are NAACCR codes for other state central registries which may be used for patients referred from or to a facility in another state. These are listed as "facility in Alabama", for example.

Also included are some long-term care facilities, health maintenance organizations and other entities which report/ed cases to the MCR.

Also included are some entities for which we obtained an ACoS code that do not report to the MCR.

The facility names in this table are not the formal names of the institutions. They are just short "in-house" names.

MCR Codes or the standard ACoS/NAACCR codes may be used for case reports sent to the MCR. Not all facilities have a known ACoS code.

Facility (short name)	MCR Code	ACoS Code
Aberjona Nursing Ctr	3848	
Addison Gilbert	2016	
Amesbury Hospital	2078	0006140030
Anna Jaques	2006	0006141500
Annemark NH	3864	
Apple Valley NH	3915	
Athol Memorial	2226	0006140065
Baystate Med Ctr	2339	0006141955
Bear Hill Nursing Ctr	3861	
Beaumont Rehab Northbridge	3160	
Beaumont Rehab Westboro	3865	
Belmont Mnr Nurs Rehab	3208	
Berkshire Med Ctr	2313	0006141705
Beth Israel Deaconess	2069	0006140170
Beverly	2007	0006140130
Boston Med Ctr	2084	0006140440
Boston Regional Med Ctr	2060	0006141350
Boston VA Healthcare System	2988	0006140570
Braintree Rehab	2333	
Brewster Senior Care	3837	
Brigham & Women's	2341	0006140218
Brockton	2118	0006140630
Brook Farm Rehab & Nurs Ctr	3539	
Cambridge	2108	0006140730
Cape Cod	2135	0006141130
Caritas Good Samaritan	2101	0006140631
Caritas Norwood (Southwood)	2114	0006141630
Carney	2003	0006140255
Charlene Mnr	3894	
Chelsea/Jewish NH	3559	
CHEM Ctr for Radiation	1340	0006143098
Children's Hospital (DFCI)	2139	0006140270
Choate Health System Caufield Ctr	2089	0006140045
Christopher House Worc	3693	
Clinton	2126	0006140840
Cooley Dickinson	2155	0006141570

Facility (short name)	MCR Code	ACoS/NAACCR Code
Cozy Corner NH	3039	
Crawford SN & Rehab	3716	
Ctr for Extended Care	3024	
Ctr for Optimum Care	3905	
Ctr for Rehab & Nurs Care	3069	
Dana-Farber	2335	0006140583
Deaconess Glover	2054	0006141450
Deaconess Nashoba	2298	0006140090
Deaconess Waltham	2067	0006142090
Den Mar NH	3297	
Don Orione NH	3479	
D'Youville Senior Care	3176	
Eastpointe Nursing Care Ctr	3939	
Elihue White NH	3414	
Elizabeth Seton Residence	3853	
Ellis Nursing & Rehab	3793	
Emerson	2018	0006140850
facility in Alabama	8037	00003700
facility in Alaska	8091	00009100
facility in Arizona	8087	00008700
facility in Arkansas	8071	00007100
facility in California	8097	00009700
facility in Colorado	8083	00008300
facility in Connecticut	8007	00000700
facility in Delaware	8017	00001700
facility in District of Columbia	8022	00002200
facility in Florida	8035	00003500
facility in Georgia	8033	00003300
facility in Hawaii	8099	00009900
facility in Idaho	8081	00008100
facility in Illinois	8061	00006100
facility in Indiana	8045	00004500
facility in Iowa	8053	00005300
facility in Kansas	8065	00006500
facility in Kentucky	8047	00004700
facility in Louisiana	8073	00007300

Facility (short name)	MCR Code	ACoS/NAACCR Code
facility in Maine	8002	00000200
facility in Maryland	8021	00002100
facility in Michigan	8041	00004100
facility in Minnesota	8052	00005200
facility in Mississippi	8039	00003900
facility in Missouri	8063	00006300
facility in Montana	8056	00005600
facility in Nebraska	8067	00006700
facility in Nevada	8085	00008500
facility in New Hampshire	8003	00000300
facility in New Jersey	8008	00000800
facility in New Mexico	8086	00008600
facility in New York	8011	00001100
facility in N. Carolina	8025	00002500
facility in N. Dakota	8054	00005400
facility in Ohio	8043	00004300
facility in Oklahoma	8075	00007500
facility in Oregon	8095	00009500
facility in Pennsylvania	8014	00001400
facility in Puerto Rico	8101	10100000
facility in Rhode Island	8006	00000600
facility in S. Carolina	8026	00002600
facility in S. Dakota	8055	00005500
facility in Tennessee	8031	00003100
facility in Texas	8077	00007700
facility in Utah	8084	00008400
facility in Vermont	8004	00000400
facility in Virginia	8023	00002300
facility in W. Virginia	8024	00002400
facility in Washington State	8093	00009300
facility in Wisconsin	8051	00005100
facility in Wyoming	8082	00008200
Fairlawn Hosp	2098	0006142320
Fairview	2052	0006141010
Fallon Health Care	5002	
Falmouth	2289	0006140923
Farren Care Ctr	3926	

Facility (short name)	MCR Code	ACoS Code
Faulkner	2048	0006140310
Forestview NH	3904	
Franklin Med Ctr	2120	0006141020
Glen Ridge NH	3919	
Hahnemann Hosp - Boston	2091	0006140340
Hale	2131	0006141080
Harrington Memorial	2143	0006141890
Harvard Vanguard	5001	
Health Alliance Leominster Burbank	2127	0006141190
Henry Heywood	2036	0006140980
Hillcrest (Berkshire)	2313	
Holy Family	2225	0006141355
Holyoke	2145	0006141110
Hubbard Regional	2157	0006142130
Island Terrace NH	3614	
Jewish NH of Western MA	3772	
Jewish Rehab Ctr	3776	
JML Care Ctr	3917	
Jordan	2082	0006141720
Joseph P. Kennedy Jr. Meml Hosp	2221	0006140610
Lafayette Convalescent	3291	
Lahey Clinic Hosp (Hitchcock)	2342	0006140690
Laurel Ridge NH	3711	
Lawrence F. Quigley Meml Hosp	2827	0006140815
Lawrence General	2099	0006141170
Lawrence Memorial	2038	0006141330
Lemuel Shattuck State Hosp	2821	
Life Care Ctr Attleboro	3942	
Life Care Ctr Auburn	3978	
Life Care Ctr Merrimac Valley	3725	
Lowell General	2040	0006141200
Ludlow Hospital	2160	0006141250
Lutheran Home of Worc	3121	
Malden	2041	0006141280
Marian Mnr	3506	
Mariner Health SE	3796	
Marlborough	2103	0006141300

Facility (short name)	MCR Code	ACoS Code
Martha's Vineyard	2042	0006141640
Mary Lane	2148	0006142100
Maryann Morse NH	3936	
Mass. Eye & Ear (MGH)	2168	0006140420
Mass. General	2168	0006140430
Mass. Respiratory	2282	
Med Ctr of Central Mass/Umass	2841	
Melrose-Wakefield	2058	0006141340
Mercy	2149	0006141940
MetroWest	2020	0006140960
Milford-Whitinsville	2105	0006141395
Milton	2227	0006141410
Morton	2022	0006142000
Mt. Auburn	2071	0006140780
N. Shore Children's Hosp	2113	0006141810
Nantucket Cottage	2044	0006141430
New England Baptist	2059	0006140460
New England Medical Center	2299	0006140465
Newton-Wellesley	2075	0006141530
Noble	2076	0006142200
North Adams	2061	0006141560
North Shore Cancer Ctr/Salem	2014	0006141820
Norwell Knoll NH	3722	
Oak Hill Nurs & Rehab	3621	
Odd Fellows Home	3126	
Olympus Specialty Hosp	2223	
Oostermans Rest Home	1241	
Penacook Place	3739	
Prescott House	3839	
Providence Extended Care	3726	
Quaboag on the Common NH	3144	
Quincy	2151	0006141740
Saints Memorial	2029	0006141220
Sancta Maria Nursing Facility	2213	0006140785
Shrewsbury Nurs Rehab Ctr	3694	
Shriners Hosp for Crippled Children	2152	0006141950
Soldiers Home Holyoke	2828	0006141122

Facility (short name)	MCR Code	ACoS Code
Somerville	2001	0006141860
South Shore	2107	0006141900
Southcoast Charlton	2337	0006140905
Southcoast St. Luke's	2010	0006141460

Spaulding Rehab	2321	
St. Anne's Hosp	2011	0006140900
St. Elizabeth's	2085	0006140620
St. Margaret's Hosp for Women	2065	0006140520
St. Patricks Mnr	3699	
St. Vincent's	2128	0006142350
Sturdy Memorial	2100	0006140080
Sunny Acres NH	3170	
Sweet Brook Care Ctr	3080	
Tewksbury State Hosp	2825	
Tobey	2106	0006142110
UMass Medical Center/Memorial	2841	0006142355
Union Atlanticare	2073	0006141260
Westridge Healthcare Ctr	3376	
Whidden	2046	0006140880
Willow Mnr	3701	
Willowood of N. Adams	3013	
Winchester	2094	0006142280
Winchester Nursing Ctr	3828	
Wing Memorial	2181	0006141660
Winthrop Hospital	2013	0006142290
Woburn Nursing Ctr	3207	
Woodlawn Nursing Rehab	3340	

Appendix H

Pediatric Staging Guide

Thanks go to Theresa Hayden from Children's Hospital in Seattle for sharing this staging guide with us when she was the NCRA pediatric registry liaison. It was developed at her institution. She sent it to us in 2000, so it does not refer to ICD-O-3 diagnoses or to SEER Summary Stage 2000.

This Guide may be used as a resource to help explain what some of the codes used in the Pediatric Stage fields represent. (Be aware that physicians at other institutions may stage pediatric cases in different ways.)

Children's
Hospital & Regional Medical Center

Cancer Registry Manual

Staging Guide for Pediatric Cancers

This guide has been developed and reviewed by the following people for use at Children's Hospital and Regional Medical Center in Seattle Washington.

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Table of Contents

Acute Lymphocytic Leukemia

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Staged according to:

Uniform approach to risk classification and treatment assignment for children with acute lymphoblastic leukemia

Used for:

Acute lymphocytic leukemia

Notes:

- Standardized staging system uses age and WBC at diagnosis. Other criteria are surface markers, sex and number of chromosomes, translocations of chromosomes and the presence or absence of CNS disease at diagnosis. All of these features should be documented clearly in the medical record.
- Burkitt's leukemia has surface immunoglobulin chains
- The rate of the response to therapy is a very good predictor of eventual outcome. Decreased blasts in the 7 and day 14 BM or in peripheral blood when the patient is treated with steroids plus IT therapy.

Stage	Description
Standard Risk	• Age 1 year through 9 years, and • WBC < 50,000
High Risk	• Age < one year, or • Age ≥ 10 years, or • WBC ≥ 50,000

Acute Non-Lymphocytic Leukemia (Page 1 of 2)

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Staged according to:

FAB Classification

CNS disease present or absent

Used for:

Acute non-lymphocytic leukemia

Notes:

Although a standardized staging system does not exist, the FAB classification and the presence or absence of CNS disease at diagnosis should be documented clearly in the medical record.

FAB Class	Description
M0	• Myeloblastic with no maturation • Monocytic cells (%): < 20 • Promyelocytes (%): < 10 • Normoblasts (%): < 50 • Notes: Cells will be <3% peroxidase positive but will have positive myeloid and negative lymphoid reaction by immunophenotyping
M1	• Myeloblastic with minimal maturation • Monocytic cells (%): < 20 • Promyelocytes (%): < 10 • Normoblasts (%): < 50 • Notes: At least 3% of blasts must be peroxidase positive
M2	• Myeloblastic with maturation • Monocytic cells (%): < 20 • Promyelocytes (%): ≥ 10 • Normoblasts (%): < 50 • Notes: > 10% promyelocytes or > 20% total myeloid cells are more mature than blasts. Auer rods, often single, are common

Acute Non-Lymphocytic Leukemia (Page 2 of 2)

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M3	• Promyelocytic • Monocytic cells (%): < 20 • Promyelocytes (%): Predominant cell • Normoblasts (%): < 50 • Notes: Heavily granulated promyelocytes. Cells often contain bundles (faggots) of auer rods
M4	• Myelomonocytic • Monocytic cells (%):≥ 20 • Promyelocytes (%):≥ 10 • Normoblasts (%): < 50 • Notes: In some cases < 20% monocytes will not be present in the marrow but can be diagnosed by finding ≥ 20% monocytic cells in the peripheral blood. The absolute number will usually be above 5000/cmm.
M5	• Monocytic • Monocytic cells (%): > 80 • Promyelocytes (%): < 10 • Normoblasts (%): < 50 • Notes: No notes
M6	• Erythroleukemia • Monocytic cells (%): variable • Promyelocytes (%): variable • Normoblasts (%): <50 • Notes: If 10% of erythroid cells are markedly dyserythropoietic, then 30% normoblasts suffice for the diagnosis.
M7	• Megakaryocytic • Monocytic cells (%): variable • Promyelocytes (%): variable • Normoblasts (%): <50 • Notes: Cells are highly polymorphic; may resemble L1 or L2 lymphoblasts. May be positive for alpha-nephthyl acetate esterase or naphthyl AS-D acetate esterase reactions with fluoride inhibition but almost always negative for alpha-naphthol butryate esterase

Myelodysplastic Syndrome

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Staged according to:

CCG guidelines

Used for:

Refractory anemia, refractory anemia with ringed sideroblasts, refractory anemia with excess blasts (RAEB), and RAEB in Transition (RAEBT)

Diagnosis	Description
Refractory Anemia (RA)	• Peripheral blood: – Reticulocytopenia – Dyserythropoiesis (variable) – Dysgranulopoiesis (infrequent) – Variable pancytopenia – < 1% blasts • BM: – Normal or hypercellular erythroid hyperplasia with dyserythropoiesis – Normal granulocytes – Normal megakaryocytes – < 5% blasts
Refractory Anemia with Ringed Sideroblasts	• Peripheral blood: – Same as RA • BM: – Same as RA except > 15% ringed sideroblasts – < 5% blasts
Refractory Anemia with Excess Blasts (RAEB)	• Peripheral blood: – Same as RA except more pancytopenia and dysgranulopoiesis – < 5% blasts • BM: – Same as RA except dysgranulopoiesis and dysmegakaryocytopoiesis – 5 - 20% blasts
RAEB in Transformation (RAEB-T)	• Peripheral blood: – Same as RAEB except ≥ 5% blasts • BM: – Same as RAEB except Auer rod positive blasts are present – 20 - 30% blasts

Neuroblastoma

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Staged according to:

International System

Used for:

Neuroblastoma

Stage	Description
1	• Localized, and – GTR with or without microscopic residual disease, and – Identifiable bilateral lymph nodes negative microscopically
2A	• Unilateral, with – Incomplete resection, and – Identifiable bilateral lymph nodes negative microscopically
2B	• Unilateral, with – Complete or incomplete resection, and – Microscopically positive ipsilateral nodes but contralateral regional lymph nodes negative
3	• Crosses midline with or without positive regional lymph nodes, or • Unilateral with positive contralateral regional lymph nodes • Midline with positive bilateral regional lymph nodes
4	• Metastatic to distant lymph nodes, bone, bone marrow, liver and/or other organs (except as in 4S).
4S	• Stage 1 or 2 primary tumor with metastases limited to liver, skin, and/or bone marrow (with < 10% tumor), and • Patient is less than one year old

Wilms Tumor

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Staged according to:

National Wilms Tumor Study Group NWTS V Protocol (effective 6/95), per Pizzo & Poplack, 3rd ed.

Used for:

Wilms Tumor

Stage	Description
I	• The tumor, limited to the kidney, was completely excised. • The renal capsule has an intact outer surface. • The tumor was not ruptured or sampled for biopsy before its removal. – Fine needle aspiration biopsy is excluded from this restriction. • The vessels of the renal sinus are not involved. • No evidence of tumor at or beyond the margins of resection is visible.
II	• The tumor extended beyond the kidney but was completely excised. • One may see regional extension of the tumor (i.e., penetration of the renal capsule or extensive invasion of the renal sinus). • The blood vessels outside in the renal parenchyma, including those of the renal sinus, may contain tumor. • Biopsy was performed (except fine needle aspiration), or the tumor spillage before or during the surgery was confined to the flank and did not involve the peritoneal surface. • No evidence of tumor at or beyond the margins of resection is present.
III	• Residual nonhematogenous tumor is present, confined to the abdomen. • Any one of the following may occur: – Lymph nodes within the abdomen or pelvis are found to be involved by tumor (renal, hilar, paraaortic, or beyond; lymph node involvement in the thorax or other extraabdominal sites is a criterion for stage IV. – The tumor has penetrated the peritoneal surface. – Tumor implants are found on the peritoneal surface. – Gross or microscopic tumor remains postoperatively (e.g., tumor cells are found at the margin of surgical resection on microscopic exam). – The tumor is not completely resectable because of local infiltration into vital structures. – Tumor spillage not confined to the flank occurred either before or during surgery.
IV	• Hematogenous metastases (lung, liver, bone, brain, etc) or lymph node metastases outside the abdominopelvic region are present.
V	• Bilateral renal involvement is present at diagnosis. An attempt should be made to stage each side according to the foregoing criteria on the basis of the extent of disease before biopsy or treatment.

Non-Hodgkins Lymphoma

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Staged according to:

St. Jude system

Used for:

Non-Hodgkins Lymphoma

Stage	Description
I	• Single tumor (extranodal) or single anatomic area (nodal), excluding mediastinum or abdomen
II	• Single tumor (extranodal) with regional node involvement on same side of diaphragm: a) Two or more nodal areas b) Two single (extranodal tumors with or without regional node involvement.
III	• Disease on both sides of the diaphragm: a) Two single tumors (extranodal) b) Two or more nodal areas – All primary intrathoracic tumors (mediastinal, pleural, thymic) – All extensive primary intraabdominal disease, unresectable – All primary paraspinal or epidural tumors regardless of other sites
IV	• Any of the above with initial CNS or bone marrow involvement (<25%)

Therapy Stratification by Group for B Cell Non-Hodgkins Lymphoma

Group	Description
A	• Completely resected Murphy stage I, or • Completely resected abdominal Murphy stage II lesions
B	• All cases not eligible for Group A or Group C
C	• Any CNS involvement and/or bone marrow involvement ≥ 25% blasts. • For CNS involvement, one or more of the following applies: – Any L3 blasts in CSF – Cranial nerve palsy (if not explained by extracranial tumor) – Clinical spinal cord compression – Isolated intracerebral mass – Parameningeal extension : cranial and/or spinal

Hodgkins Disease (page 1 of 2)

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Staged according to:

Ann Arbor System

Used for:

Hodgkins Lymphoma

Definitions & Conventions:

- Large mediastinal mass: Tumor diameter > 1/3 of the thoracic diameter (measured at the level of the dome of the diaphragm on a 6 foot upright PA CXR)
- Large extra-mediastinal nodal aggregate: > 10 cm
- B Symptoms:
  - Unexplained loss of more than 10% of body weight in the six months before diagnosis;
  - Unexplained fever with temperatures above 39°C; and
  - Drenching night sweats.
  - Pruritis alone does not qualify for B classification, * nor does a short febrile illness associated with an infection.
    Note: Pruritis as a systemic symptom remains controversial. This symptom is hard to define quantitatively and uniformly, but when it is recurrent, generalized, and otherwise unexplained, and when it ebbs and flows parallel to disease activity, it may be the equivalent of a B symptom.
  - If present, append a "**B**" to the numeric stage. If absent, append an "**A**" to the numeric stage.
- Involvement of an extralymphatic organ or site:
  - Append the letter "**E**" after the "A" or "B".
- Splenic involvement:
  - Append the letter "**S**" after the "A" or "B".

Hodgkins Disease (page 2 of 2)

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Stage	Description
IA	• Single lymph node region • B symptoms *absent*
IB	• Single lymph node region • B symptoms *present*
IIA	• Two or more lymph node regions on the same side of the diaphragm • B symptoms *absent*
IIB	• Two or more lymph node regions on the same side of the diaphragm • B symptoms *present*
IIIA	• Disease on both sides of the diaphragm • B symptoms *absent*
IIIB	• Disease on both sides of the diaphragm • B symptoms *present*
IVA	• Disseminated • B symptoms *absent*
IVB	• Disseminated • B symptoms *present*

Group Classification for Hodgkins Lymphoma (ONLY use for CCG 5942)

Group	Description
1	• Stage IA or IIA without large mediastinal mass and/or large extramediastinal nodal aggregate
2	• Stage IIIA or IVA without large mediastinal mass and/or large extramediastinal nodal aggregate
3	• Stage IA-IVA with large mediastinal mass and/or large extramediastinal nodal aggregate • Stage IB-IVB regardless of mediastinal mass or extramediastinal nodal aggregate

Rhabdomyosarcoma (page 1 of 5)

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Staged according to two systems:

1. Clinical TNM (As modified by the International Rhabdomyosarcoma Study Group)

2. International Rhabdomyosarcoma Study Group Clinical Grouping Classification

Used for:

Rhabdomyosarcoma

TNM Definitions:

TUMOR

T (site) 1 = confined to anatomic site of origin
a ≤ 5 cm diameter in size
b > 5 cm diameter in size
T (site) 2 = extension and/or fixation to surrounding tissue
a ≤ 5 cm diameter in size
b > 5 cm diameter in size

REGIONAL NODES

N0 regional nodes not clinically involved
N1 regional nodes clinically involved by neoplasm
Nx clinical status of regional nodes unknown (especially sites that preclude lymph node evaluation)

METASTASES

M0 no distant metastasis
M1 metastasis present

Rhabdomyosarcoma (page 2 of 5)

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Anatomic Definitions:

1. PARAMENINGEAL

1.1. Middle Ear

- This refers to a primary which begins medial to the tympanic membrane. This tumor is often advanced at presentation and because of extension laterally may present with a mass in front of or under the ear suggesting a parotid origin. It may also extend through the tympanic membrane and appear to be arising in the ear canal. When there is doubt about the site of origin, the "middle ear" designation should be picked as it implies the more aggressive therapy required for parameningeal sites.

1.2. Nasal Cavity and Paranasal Sinuses

- The three paranasal sinuses are the maxillary sinuses, the ethmoid sinuses, and the sphenoid sinus. These surround the nasal cavity and a primary in one will frequently extend to another. It can be difficult to determine the exact site of origin but the choice is academic as the randomization is not affected. The site designation will have a bearing on the design of radiotherapy portals.
- Tumor arising in the maxillary or the ethmoid sinuses may invade the orbit. This is much more likely than a primary in the orbit invading one of the sinuses. When the distinction between orbit and paranasal sinus is unclear, the site selected should be paranasal sinus as it the more likely primary site and requires appropriately more aggressive therapy.
- A primary arising in the sphenoid sinus (rare) may extend inferiorly to involve the nasopharynx. Again the choice of site is academic as the therapy is not different.

1.3. Nasopharynx

- This refers to the superior portion of the pharynx which is bounded anteriorly by the back of the nasal septum, superiorly by the sphenoid sinus, inferiorly by a level corresponding to the soft palate, and laterally and posteriorly by the pharyngeal walls.

1.4. Infratemporal Fossa/Parapharyngeal Area

- This refers to the tissues bounded laterally by the medial lobe of the parotid gland and medially by the pharynx. Large tumors in this region may extent through the parotid gland and present as a mass of the lateral face, sometimes extending even to the cheek. Where there is doubt as to the primary, the parameningeal designation should be chosen as it confers appropriately more aggressive treatment. The superior boundary of this tissue volume is the base of the skull just under the temporal lobe, hence the term "infratemporal." The distinction between this and the " parapharyngeal" area is academic.

2. ORBIT

2.1. Eyelid

- This site is sometimes erroneously designated as "eye." Although there may be one case arising from the conjunctiva of the eye, the globe itself is not a primary site. The eyelid is much less frequent than the orbit itself.

2.2. Orbit

- This refers to the bony cavity which contains the globe, nerve and vessels, and he extra ocular muscles. Tumor in this site will only rarely invade the bony walls and extend into the adjacent sinuses. This is why this tumor which is clearly adjacent to the skull base and its meninges is not by its natural history appropriate to include in the parameningeal sites.

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3. HEAD AND NECK

3.1. Scalp
- This site includes primaries arising apparently in or just below the skin of all the tissues of the face and head that are not otherwise specified below. This usually means the scalp, external ear and pinna, the nose and forehead, but not the eyelids or cheek.

3.2. Parotid
- The parotid gland lies just in front of and under the ear and may surround both sides of the posterior aspect of the ascending ramus of the mandible. As noted above, large primaries in the infratemporal fossa may erode through the parotid. A true parotid primary should not, on radiographic studies, reveal a mass in the infratemporal fossa.

3.3. Oral Cavity
- This includes the floor of the mouth, the buccal mucosa, the upper and lower gums, the hard palate, and the oral tongue (that portion of the tongue anterior to the circumvallate papillae). A primary arising in the buccal mucosa can be impossible to distinguish from one arising in the cheek but the distinction is academic. This would also include those lesions arising in and near the lips.

3.4. Larynx
- This refers to primaries arising in the subglottic, glottic, or supraglottic tissues. Tumors of the aryepiglottic folds can be difficult to distinguish from the hypopharynx but the distinction is academic.

3.5. Oropharynx
- This includes tumors arising from the anterior tonsillar pillars, the soft palate, the base of the tongue, the tonsillar fossa, and oropharyngeal walls.
- Tumors arising in the peripharyngeal space may indent the oropharyngeal wall. In this circumstance, the primary should be considred parameningeal.
- If the mucosa of the oropharynx actually contains visible tumor as opposed to being bulged by it, the primary would be oropharynx.
- Primaries arising in the tongue base, soft palate, or tonsillar region may extend into the oral cavity. The oropharynx designation is preferred.

3.6. Cheek
- This refers to the soft tissues of the face that surround the oral cavity. Tumors arising in the parotid may invade the cheek. As noted above, the distinction between this and the buccal mucosa is academic.

3.7. Hypopharynx
- This refers to the pyriform sinus and may be difficult to distinguish from larynx.

3.8. Thyroid and Parathyroid
- Primaries arising in these two sites are exceedingly rare, if they exist at all. If those structures are involved, it would more likely be from a primary arising in an adjacent structure such as the trachea..

3.9. Neck
- This refers to the soft tissues of the lateral neck between the mastoid tip and the clavicle. It does not include those medial structures such as hypopharynx and larynx noted above. Unfortunately this site overlaps with the designation "paraspinal" included under the site group "trunk." Primaries arising in the neck can and frequently do behave as a paraspinal primary with direct invasion into the spinal extradural space.

Rhabdomyosarcoma (page 4 of 5)

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Clinical TNM Classification

Stage	Sites	T	Size	N	M
1	• Orbit • Head & Neck (excluding parameningeal) • GU - non bladder/non prostate	1 or 2	a or b	N0 or N1 or Nx	M0
2	• Bladder • Prostate • Extremity • Cranial • Parameningeal • Other (including trunk, retroperitoneum, etc)	1 or 2	a	N0 or Nx	M0
3	• Bladder • Prostate • Extremity • Cranial • Parameningeal • Other (including trunk, retroperitoneum, etc)	1 or 2 1 or 2	a b	N1 N0 or N1 or Nx	M0 M0
4	• All	1 or 2	a or b	N0 or N1	M1

Rhabdomyosarcoma (page 5 of 5)

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IRS Clinical Group Classification

Clinical Group	Description
I	• Localized disease – Regional lymph nodes not involved - lymph node biopsy or dissection required except for head & neck lesions • Completely resected – This includes both gross inspection and microscopic confirmation of complete resection. Any nodes may inadvertently taken with the specimen must be negative. If the latter should be involved microscopically, then patient is placed in Clinical Group IIB or IIC.
IA	• Localized to muscle or organ of origin • Completely resected
IB	• Contiguous involvement - infiltration outside the muscle or origin of origin, as through fascial planes. • Completely resected
II	• Gross total resection with evidence of regional spread
IIA	• Gross total resection with microscopic residual disease – Surgeon believes all tumor has been removed, but pathologist finds tumor at margin of resection and additional resection to achieve clean margin is not feasible. – No evidence of gross residual tumor. – No evidence of regional lymph node involvement – Once radiotherapy and/or chemotherapy have been started, re-exploration and removal of the area of microscopic residual does not change patient's group.
IIB	• Regional disease with involved lymph nodes, completely resected with no microscopic residual – Complete resection with microscopic confirmation of no residual disease makes this different from Groups IIA and IIC. – In contrast to Group IIA, regional nodes (which must be completely resected) are involved, but the most distal node is histologically negative.
IIC	• Regional disease with involved nodes, grossly resected, but with evidence of microscopic residual and/or histologic involvement of the most distal regional node (from the primary site) in the dissection. – The presence of microscopic residual disease makes this group different from Group IIB, and nodal involvement makes this group different from Group IIA.
III	• Incomplete resection with gross residual disease
IIIA	• Incomplete resection with gross residual disease • After biopsy only
IIIB	• Incomplete resection with gross residual disease • After gross or major resection of the primary tumor (> 50%)
IV	• Distant metastatic disease present at onset – Includes lung, liver, bones, bone marrow, brain, and distant muscle and nodes. – Excludes regional nodes and adjacent organ infiltration which places the patient in a more favorable grouping (as noted under Group II) – The presence of positive cytology in CSF, pleural or abdominal fluids as well as implants on pleural or peritoneal surfaces are regarded as indications for placing the patient in Clinical Group IV.

Soft Tissue Sarcoma, Nonrhabdo (Page 1 of 4)

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Staged according to:

AJCC Cancer Staging Manual, 5th Edition, Soft Tissue Sarcoma chapter, pp 149-156

Used for:

- All soft tissue sarcomas except:
  - ✗ Rhabdomyosarcoma
    This is a departure from the inclusion criteria in the AJCC Cancer Staging Manual because this hospital has chosen to use a simplified version of this TNM scheme in addition to the International Rhabdomyosarcoma Study Group staging scheme for rhabdomyosarcoma.
  - ✗ Kaposi's sarcoma
  - ✗ Dermatofibrosarcoma [protuberans]
  - ✗ Fibrosarcoma grade I [desmoid tumor]
  - ✗ Sarcoma arising from the dura mater, brain, parenchymatous organs or hollow viscera

- Soft tissue sarcomas (excluding those just stated to be excluded) arising in any of these anatomic sites:

C38.0	Heart
C38.1	Anterior mediastinum
C38.2	Posterior mediastinum
C38.3	Mediastinum, NOS
C38.8	Overlapping lesion of heart, mediastinum, & pleura
C47.0	Peripheral nerves & autonomic nervous system of head, face, & neck
C47.1	Peripheral nerves & autonomic nervous system of upper limb & shoulder
C47.2	Peripheral nerves & autonomic nervous system of lower limb & hip
C47.3	Peripheral nerves & autonomic nervous system of thorax
C47.4	Peripheral nerves & autonomic nervous system of abdomen
C47.5	Peripheral nerves & autonomic nervous system of pelvis
C47.6	Peripheral nerves & autonomic nervous system of trunk, NOS
C47.8	Overlapping lesion of peripheral nerves & autonomic nervous system
C47.9	Autonomic nervous system, NOS
C48.0	Retroperitoneum
C48.1	Specified parts of peritoneum
C48.2	Peritoneum, NOS
C48.8	Overlapping lesion of retroperitoneum & peritoneum
C49.0	Connective, subcutaneous, & other soft tissues of head, face, & neck
C49.1	Connective, subcutaneous, & other soft tissues of upper limb & shoulder
C49.2	Connective, subcutaneous, & other soft tissues of lower limb & hip
C49.3	Connective, subcutaneous, & other soft tissues of thorax
C49.4	Connective, subcutaneous, & other soft tissues of abdomen
C49.5	Connective, subcutaneous, & other soft tissues of pelvis
C49.6	Connective, subcutaneous, & other soft tissues of trunk, NOS
C49.8	Overlapping lesion of connective, subcutaneous, & other soft tissues
C49.9	Connective, subcutaneous, & other soft tissues of, NOS

Soft Tissue Sarcoma, Nonrhabdo (Page 2 of 4)

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Notes:

For more detailed discussion of this staging system, refer to the AJCC Cancer Staging Manual.

A patient may be staged twice: Once clinically (prior to definitive therapy) and once pathologically (after resection of primary). The clinical and pathologic stages may or may not be the same.

In both clinical and pathologic staging, a T (primary tumor), N (regional lymph nodes), M (distant metastases), and a G (histopathologic grade) is assigned. The patient will then be assigned to a stage grouping, based on the TNM and G staging values, as defined in the staging table.

DEPTH: Superficial is defined as lack of any involvement of the superficial investing muscular fascia in extremity lesions. For practical purposes, all retroperitoneal and visceral lesions will be deep lesions.

1. Superficial
   a. Lesion does not involve superficial fascia
2. Deep
   a. Lesion is deep to or invades the superficial (investing) fascia.
   b. All retroperitoneal visceral lesions or lesions with major vessel invasion, intathoracic lesions, and the majority of heand and neck tumor are considered deep.
3. Depth should be a subcategory of tumor size (T):
   a. Tumor … 5 cm: T1a = superficial, T1b = deep
   b. Tumor > 5 cm: T2a = superficial, T2b = deep

NODAL INVOLVEMENT: Because of the rarity of lymph node involvement in sarcomas, the designation of NX may not be appropriate and could be considered N0 if no clinical involvement is evident.

GRADE: Grade should be assigned. The following grading system is preferred:

Grade X:	Grade cannot be assessed
Grade 1:	Well differentiated
Grade 2:	Moderately differentiated
Grade 3:	Poorly differentiated
Grade 4:	Undifferentiated

Soft Tissue Sarcoma, Nonrhabdo (Page 3 of 4)

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Stage	Description
	PRIMARY TUMOR (T)
TX	• Primary tumor cannot be assessed
T0	• No evidence of primary tumor
T1 T1a T1b	• Tumor 5 cm or less in greatest diameter • Superficial tumor • Deep tumor
T2 T2a T2b	• Tumor more than 5 cm in greatest diameter • Superficial tumor • Deep tumor
	REGIONAL LYMPH NODES (N)
NX	• Regional lymph nodes cannot be assessed
N0	• No regional lymph node metastases
N1	• Regional lymph node metastases present
	DISTANT METASTASES (M)
MX	• Distant metastases cannot be assessed
M0	• No distant metastases
M1	• Distant metastases present
	HISTOPATHOLOGIC GRADE (G)
GX	• Grade cannot be assessed
G1	• Well differentiated
G2	• Moderately differentiated
G3	• Poorly differentiated
G4	• Undifferentiated

(Continue to next page for stage gropuings)

Soft Tissue Sarcoma, Nonrhabdo (Page 4 of 4)

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Stage	Description
	STAGE GROUPING
IA	• Low grade, small, superficial or deep • G1-2, T1a-1b, N0, M0
IB	• Low grade, large, superficial • G1-2, T2a, N0, M0
IIA	• Low grade, large, deep • G1-2, T2b, N0, M0
IIB	• High grade, small, superficial or deep • G3-4, T1a-1b, N0, M0
IIC	• High grade, large, superficial • G3-4, T2a, N0, M0
III	• High grade, large, deep • G3-4, T2b, N0, M0
IV	• Any metastases or regional node involvement • Any G, any T, N1, M0 • Any G, any T, N0, M1

Bone (Page 1 of 2)

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Staged according to:

AJCC Cancer Staging Manual, 5th Edition, Bone chapter, pp 143-147

Used for:

- All sarcomas arising in bone except:
  - ✗ Juxtacortical osteosarcoma
  - ✗ Juxtacortical chondrosarcoma
  - ✗ Primary malignant lymphoma
  - ✗ Multiple myeloma

Notes:

For more detailed discussion of this staging system, refer to the AJCC Cancer Staging Manual.

A patient may be staged twice: Once clinically (prior to definitive therapy) and once pathologically (after resection of primary). The clinical and pathologic stages may or may not be the same.

In both clinical and pathologic staging, a T (primary tumor), N (regional lymph nodes), M (distant metastases), and a G (histopathologic grade) is assigned. The patient will then be assigned to a stage grouping, based on the TNM and G staging values, as defined in the staging table.

HISTOPATHOLOGIC TYPE:

A. Bone forming
   1. Osteosarcoma (osteogenic sarcoma)
B. Cartilage forming
   1. Chondrosarcoma
   2. Mesenchymal chondrosarcoma
C. Giant cell tumor, malignant
D. Ewing's sarcoma
E. Vascular tumors
   1. Hemangioendothelioma
   2. Hemangiopericytoma
F. Connective tissue tumors
   1. Fibrosarcoma
   2. Liposarcoma
   3. Malignant mesenchymoma
   4. Undifferentiated sarcoma
G. Other tumors
   1. Chordoma
   2. Adamantinoma of long bones

NODAL INVOLVEMENT: Because of the rarity of lymph node involvement in sarcomas, the designation of NX may not be appropriate and could be considered N0 if no clinical involvement is evident.

GRADE: Grade should be assigned. The following grading system is preferred:

Grade X:	Grade cannot be assessed
Grade 1:	Well differentiated
Grade 2:	Moderately differentiated
Grade 3:	Poorly differentiated
Grade 4:	Undifferentiated (Ewing's sarcoma is classified as Grade 4)

Bone (Page 2 of 2)

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Stage	Description
	PRIMARY TUMOR (T)
TX	• Primary tumor cannot be assessed
T0	• No evidence of primary tumor
T1	• Tumor confined within the cortex
T2 T2a T2b	• Tumor invades beyond the cortex • Tumor 8 cm or less in greatest dimension • Tumor more than 8 cm in greatest dimension
	REGIONAL LYMPH NODES (N)
NX	• Regional lymph nodes cannot be assessed
N0	• No regional lymph node metastases
N1	• Regional lymph node metastases present
	DISTANT METASTASES (M)
MX	• Distant metastases cannot be assessed
M0	• No distant metastases
M1	• Distant metastases present
	HISTOPATHOLOGIC GRADE (G)
GX	• Grade cannot be assessed
G1	• Well differentiated/Low grade
G2	• Moderately differentiated/Low grade
G3	• Poorly differentiated/High grade
G4	• Undifferentiated/High grade
	STAGE GROUPING
IA	• G1-2, T1, N0, M0
IB	• G1-2, T2, N0, M0
IIA	• G3-4, T1, N0, M0
IIB	• G3-4, T2, N0, M0
III	• Not defined
IVA	• Any G, any T, N1, M0
IVB	• Any G, any T, any N, M1

Germ Cell, Extragonadal

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Staged according to:

CCG Guidelines

Used for:

Any germ cell tumor not arising in the ovaries or testis.

Stage	Description
I	• Gross total resection with negative margins
II	• Microscopic residual with negative regional lymph nodes, or • No microscopic residual but positive regional lymph nodes
III	• Gross residual or biopsy only
IV	• Metastatic

Germ Cell, Ovarian

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Staged according to:

CCG Guidelines

Used for:

Any germ cell tumor arising in the ovaries.

Notes:

Lymph node sizes referred to here must be as measured by the patholgist

Stage	Description
I	• Limited to ovaries • Markers normal after appropriate half life decline
II	• Microscopic residual or positive regional lymph nodes (≤ 2 cm) • Peritoneal washings negative for malignant cells – Presence of gliomatosis peritonei does not result in changing to stage II disease to higher stage.
III	• Regional lymph nodes positive (> 2 cm) • Gross residual or biopsy only • Contiguous visceral involvement (omentum, intestine, bladder) • Positive peritoneal washings
IV	• Metastatic

Germ Cell, Testicular

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Staged according to:

CCG Guidelines

Used for:

Any germ cell tumor arising in the testis.

Notes:

Lymph node sizes referred to here must be as measured by the pathologist

AFP half life = 5 days

βHCG = 16 hours

Stage	Description
I	• Limited to testis • Completely resected by high inguinal orchiectomy • No clinical, radiographic, or histologic evidence of disease beyond the testes • Markers normal after appropriate half life decline. • Patients with normal or unknown tumor markes at diagnosis must have a negative ipsilateral retroperitoneal node sampling to confirm Stage I disease.
II	• Transcrotal orchiectomy • Microscopic disease in scrotum or high in spermatic cord (≤ 5 cm from proximal end) • Retroperitoneal lymph node involvement (≤ 2 cm), and/or • Increased tumor markers after appropriate half life decline.
III	• Retroperitoneal lymph node involvement (≥ 2 cm) • No visceral or extra-abdominal involvement
IV	• Metastatic

Liver

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Staged according to two systems:

1. CCG Guidelines

2. AJCC Cancer Staging Manual, 5th Edition, Liver chapter, pp 97-101

Used for:

Liver tumors.

CCG Staging Scheme

Stage	Description
I	• Gross total resection
IA	• Gross total resection, and – Favorable histology
IB	• Gross total resection, and – Unfavorable histology
II	• Microscopoic residual, and – Negative regional lymph nodes, and – No tumor spill
IIA	• Gross total resection, with either – Regional lymph nodes positive, or – Tumor spill
IIB	• Subtotal resection
III	• Gross residual tumor with either – Regional lymph nodes positive, or – Tumor spill
IIIA	• Gross total resection with either – Regional lymph nodes positive, or – Tumor spill
IIIB	• Gross residual tumor
IV	• Metastatic
IVA	• Gross total resection with metastases
IVB	• Gross residual tumor with metastases

Medulloblastoma

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Staged according to:

CCG Guidelines, noted as derived from classification system of Chang, et al.

Used for:

Medulloblastoma

Comments:

Per Dr. Russ Geyer 8/99, current CCG studies only use the "M" category of the Chang system and not the "T" category. Therefore, only the "M" category is shown here.

Stage	Description
M0	• No evidence of gross subarachnoid or meatogenous metastases
M1	• Microscopic tumor cells found in cerebrospinal fluid
M2	• Gross nodular seedings demonstrated in the cerebellar, cerebral subarachnoid space, or in the third or lateral ventricles
M3	• Gross nodular seedings in the spinal subarachnoid space
M4	• Extraneural metastases

Brain, Non-Medulloblastoma

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Staged according to:

CCG Guidelines

Used for:

Any brain tumor except medulloblastoma.

Comments:

Per Dr. Russ Geyer 8/99, current CCG studies only use the "M" category of the Chang system and not the "T" category. Therefore, only the "M" category is shown here.

Stage	Description
MX	• Presence of mets cannot be assessed
M0	• No distant mets
M1	• Distant mets present

Histiocytosis

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Staged according to:

Lahey's Criteria (1975)

Used for:

Any Histiocytosis.

Stage	Description
I	• Without organ dysfunction as defined in stage II
II	• With any organ dysfunction as defined here: • LIVER: – Hyponatremia (< 5.5 mg/dl Ttl protein &/or < 2.5 gm/dl Albumin) – Acites – Hyperbilirubinemia (> 1/5mg/dl not due to hemolysis) – PTT > 50% of control value • HEMATOPOIETIC: – Anemia (< 9 gm/dl Hgb, not due to iron deficiency or other known etiology) – Neutropenia (neutrophils < 1500/mm3) • LUNG: – Tachypnea due to the disease itself – Dyspnea due to the disease itself – Cyanosis due to the disease itself – Pneumothorax or pleural effusion (with or without cough) due to the disease itself

Retina

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Staged according to:

Reese-Ellsworth Classification

Used for:

Retinoblastoma

Group	Description
I A	• VERY FAVORABLE. Solitary tumor, smaller than 4 disk diameters (1DD = 1.5 mm), at or behind the equator
I B	• VERY FAVORABLE. Multiple tumors, none larger than 4 disk diameters, all at or behind the equator.
II A	• FAVORABLE. Solitary tumor, 4-10 disk diameters, at or behind the equator.
II B	• FAVORABLE. Multiple tumors, 4-10 disk diameters, behind the equator
III A	• DOUBTFUL. Any lesion anterior to the equator.
III B	• DOUBTFUL. Solitary tumors larger than 10 disk diameters behind the equator.
IV A	• UNFAVORABLE. Multiple tumors, some larger than 10 disk diameters.
IV B	• UNFAVORABLE. Any lesion extending anteriorly to the ora serrata
V A	• VERY UNFAVORABLE. Tumors involving more than half of the retina
V B	• VERY UNFAVORABLE. Vitreous seeding.